

FACULTY OF DENTISTRY LIBRARY
UNIVERSITY OF TORONTO



3 1761 03924694 7



Digitized by the Internet Archive
in 2025 with funding from
University of Toronto

<https://archive.org/details/31761039246947>

lucy's index 80 '80

B



the canadian dental hygienist • l'hygieniste dentaire du canada

For proven caries reduction...

GOOD

office fluoride treatments



BETTER

office fluoride treatments
plus Crest



**Crest...the only dentifrice with proven efficacy
in combination with office fluoride treatments.**

The latest Crest clinical study* has now proven the extended benefit of Crest in combination with acidulated phosphate fluoride (APF) office topicals. This two-year study showed that the group receiving an office APF topical and brushing with Crest had 19 percent fewer DMFS (decayed, missing, or filled surfaces) than the group receiving an office APF topical and brushing with a placebo dentifrice.

Five earlier studies have proven this extended benefit of Crest with SnF_2 topicals. The DMFS increment reduction

for combined Crest plus SnF_2 topicals and prophylaxis ranged from 48 percent to 71 percent.

For further information on these studies—or any of the 21 Crest clinical studies, write to Crest Professional Services, P.O. Box 355, Station "A", Toronto, Ontario M5W 1C5.

*Beiswanger, B.B., et al.: J. Dent. Child. 45:137, 1978.



"Crest contains stannous fluoride which is, in our opinion, an effective decay preventive agent, and is of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

—CANADIAN DENTAL ASSOCIATION.

Although there are many
fluoride dentifrices, only **Crest** has proven efficacy in combination
with office fluoride treatments.

The Canadian Dental Hygienist L'Hygieniste Dentaire du Canada

SPRING 1981 PRINTEMPS

VOLUME 15, NO. 1

Editor/Redacteur en chef
Stephanie Nagle, 2221 Victoria Avenue
Windsor, Ontario N8X 1R2

Advertising Manager/Gérant de la publicité
Subscriptions Manager/Gérant des abonnements
Doug Gordon, Graphic Media
2646 West 3rd Avenue,
Vancouver, B.C. V6K 1M3

Advisors/Conseillers
Joan Voris, 3589 Osler Street,
Vancouver, B.C. V6H 1M3

Marjorie Dimitri
1606 Ayleslynn Drive
Vancouver, B.C. V7J 2T3

Louise Gosemick
8078 De Lorimier,
Montreal, Quebec H2E 2P9

Publisher/Editeur
Doug Gordon, Graphic Media
2646 West 3rd Avenue,
Vancouver, B.C. V6K 1M3

THE CANADIAN DENTAL HYGIENIST is the official journal of the Canadian Dental Hygienists' Association and is published quarterly.

All journal communications should be directed to the Editor, except subscription and advertising matters which should be addressed to the respective staff members.

Subscription rates for non-members are: \$15.00 per year in Canada and \$22.50 per year foreign.

The opinions expressed in editorials or articles are those of the authors and do not necessarily represent the views of the Association, the Publisher or the Editor.

L'HYGIENISTE DENTAIRE DU CANADA est la revue officielle de l'Association des hygiénistes dentaires du Canada et est publiée à tous trois mois.

Toutes communications ayant trait à la revue devraient être adressées au Rédacteur en chef, à part les abonnements et tout ce qui concerne la publicité, ce qui, de leur côté, devraient être adressés aux membres du personnel respectifs.

Les tarifs d'abonnements pour les non-membres sont les suivants: \$15.00 par année au Canada et \$22.50 par année en pays étranger.

Les opinions exprimées dans les éditoriaux ou dans les articles celles des auteurs et ne représentent pas nécessairement les points de vue de l'Association, de l'Editeur or du Rédacteur.

CONTENTS/CONTENU

ARTICLES/ARTICLES

- 10 Career Options in Dental Hygiene, K. MacDonald, R.D.H., M.Ed. and M. Miller, R.D.H., B.A.
- 14 Fatal Incidents of Fluoride Intoxification. A. Golinsky, R.D.H.
- 19 Prophylaxis Prior to Topical Fluoride Application: A Questionable Procedure? S. Nagle, R.D.H., B.Sc.D.

FEATURES/REPORTAGE

- 3 Editorial - April is Dental Health Month
- 9 Self-assessment Test - Fluorides
- 17 Alternatives: Dental Hygiene in a Children's Hospital. S. Vause, R.D.H.
- 25 Annual Index

DEPARTMENTS/SECTIONS

- 5 Newslite
- 8 Letters
- 22 Directory 1980-81
- 24 Classified Advertising
- 24 Index to Advertisers



MEMBER PUBLICATION
AMERICAN ASSOCIATION OF DENTAL EDITORS
617 6/CN ISSN 0008-3380

Butler

Prescribe THE PROFESSIONAL DENTAL PRODUCT LINE...available at your local drug counter.

THERE'S A Butler PREVENTIVE AID FOR EVERY PATIENT'S NEEDS.

- Soft G•U•M® Toothbrushes (Adult, Youth, Junior)
- Flosses—New Shred-Resistant Unwaxed, Regular Unwaxed, and Bit O' Wax; 50, 100 & 300 yds.
- EEZ-Thru® Floss Threader
- Proxabrush®; Metal or Plastic
- Flossmate® Floss Handle
- Red Cote® Plaque Disclosants
- Stimulator Handle
- Mouth Mirrors
- Travel Toothbrush

Write for Rx Pad and complete product line catalog.



Your single source for Quality Preventive Aids

Packaging is for retail drug counter

Butler

JOHN O. BUTLER COMPANY

9715 Cote De Liesse Rd. Dorval, Quebec, H9P1A3

April is Dental Health Month

April is once again National Dental Health Month and the theme is "Good Mouthkeeping" or "Un sourire, un ami". The emphasis is directed toward children so that they may enjoy a lifetime of good oral health. The habits of hygiene and nutrition must be introduced in early childhood to develop and maintain an unconscious continuity throughout life. Your efforts, as part of a health oriented team, can be most effective in this aspect. When planning activities for N.D.H.M., year round and on-going projects for Canadians with limited access to dentistry are a most rewarding challenge. Children deserve our efforts year round to remind them that "Good Mouthkeeping" is a worthwhile lifetime investment.

Many people over the past year have put a great deal of time and effort into the initial organizing of Dental Health Month. It's now our turn, at the grassroots level, "to keep the ball rolling". The national event is a natural starting point for sparking the interest of people. The April activities will focus on creating awareness on a positive note. But, how will it be kept alive for the remainder of the year?

It appears dental I.Q. is the highest in cities where there is a concentration of dental personnel and, conversely, rural populations exhibit the lowest dental I.Q. If the "have" areas could share with the "have not" areas we would be reaching people lacking access to dental health education.

When your society is looking for a unique project, consider an ongoing dental health project to provide optimal benefits to the community. Each community must have an area of concern to act as a basis for a continuing project. A preventive dental information package could be assembled at any time during the year and offered for distribution to rural areas via public health personnel, a

local hygienist, or dentist. This would be fulfilling the true essence of community dental health. The package could consist of pamphlets produced free by the federal and provincial governments, purchased at a small cost from the Canadian Dental Association, or produced by your own group. Materials obtained free from manufacturing companies (i.e. toothbrushes, floss and disclosing tablets) could be included.

In past years one of the more successful projects carried out has been a "New Mother's Package", originated by the Dental Health Professions of Alberta, sent to each new mother during the month of April. The package contained a letter of introduction and three pamphlets regarding children's teeth. The appropriately printed envelopes are now available from C.D.A., and they can be filled with materials of your choice. A similar dental care package is being considered in Ontario for senior citizens in nursing homes. Some areas have also distributed educational flyers to drug stores for shopping bag stuffers or have had inserts on dental care accompany utility bills.

In short, what we are saying is that good projects and educational ideas do not have to be utilized only in April. They can be carried out anytime of the year, all year round. If you have a project idea, or even a half-formed flicker of an idea that could be expanded into a full scale project for use over the next year, contact your local or provincial N.D.H.M. representative for guidance and let us know of your ideas so that they can be shared, via the Journal, with other societies across the country.

*Dale Scanlan, Chairman
Dianne McCambly
Community Dental Health Committee/
National Dental Health Month*

*Three different
Dentsply®-Cavitron® models,
all with a common promise:*



Uncommonly gentle and efficient prophylaxis.

Dentsply-Cavitron Ultrasonic units represent the ultimate in design and engineering excellence for safe, gentle, efficient prophylaxis. The operating characteristics have evolved from two decades of continued design refinement and the total experience of 100,000 units world-wide. **There is no substitute.**

The "2001" is the newest, the most advanced. It has automatic tuning, solid state circuitry and up to 28-watts of output scaling power. Optional fingertip "on-off" control and optional automatic cord retraction.

The "1010" has total solid state circuitry, automatic tuning and automatic cord retraction and storage.

The "Seventy-Six"® has total solid state circuitry, linear frequency control for easy, one finger tuning and the sophisticated printed circuit board for easy servicing.



These three models accept all Dentsply-Cavitron inserts.

**DENTSPLY™
Equipment**  Dentsply International

Hygienists branch out into Playwriting and Performing

Schoolchildren involved in the New Brunswick public health program have been receiving their dental health information in a unique manner through a dental health skit, complete with costumes, which has been written in French and English and performed by two hygienists, Mary Pelletier and Lucille Gallant. One plays Miss Tooth and Sally and the other plays Mother, Mr. Germ, and Super Dentist.

The play opens with Miss Tooth introducing herself, explaining that she lives in Sally's mouth, and asking the audience how to keep her healthy and happy. In the next scene Mother is looking for Sally who enters, exhausted from playing, and goes immediately to bed after a snack of pop and cookies. Miss Tooth returns, covered with germs and sugar (pieces of felt stuck all over her crown), and tearfully asks what will happen to her, at which point the audience yells out "cavities". The lights are dimmed and Mr. Germ sneaks into the

room dressed in black fur and proceeds to chisel, hammer, and burrow cavities. He laughs and boasts that this is only one of his jobs this particular night and that many more are waiting in other mouths. The alarm clock sounds and Miss Tooth awakens and asks the audience "what happened", to which they usually respond with every detail. With Miss Tooth's pleas for help, Super Dentist appears toting a basket of good foods, floss, brush, drill, and filling material. He restores Miss Tooth to good health and hopes that he can see Sally to teach her a few necessary dental health rules. Sally appears on her way to school and Super Dentist reviews brushing, flossing, and inspects her lunch pail, which of course is loaded with the wrong items so that he can elaborate on the composition of a nutritional lunch.

The play closes with a little song which the hygienists wrote:

English (Sung to the tune of Row, Row, Row Your Boat)

Brush, brush, brush your teeth
Brush them every day
Let us chase the plaque away
Morning, noon, and night

French (Sung to the tune of Savez-vous planter les choux?)

Savez-vous broser les dents à la mode?

Savez-vous broser les à la mode de chez nous?

2) On les brosse en avant ...

3) On les brosse sur le dos ...

4) On les brosse le dessus ...

à la mode de chez nous?

Ms. Gallant and Ms. Pelletier have performed this play about 400 times in all of their Health Region's schools. They aimed their message at children in Grades 1-6, although some kindergartens did request a visit, as well as a few Jr. high levels. They also performed for their provincial dental hygiene association and at the CDHA Convention last summer.

Many teachers have evaluated the performance and rated it as the best classroom approach they have ever seen. The hygienists have always met with such encouraging comments that they enjoy performing it a little more each time.

New reports on Preventive Dentistry and Oral Radiology

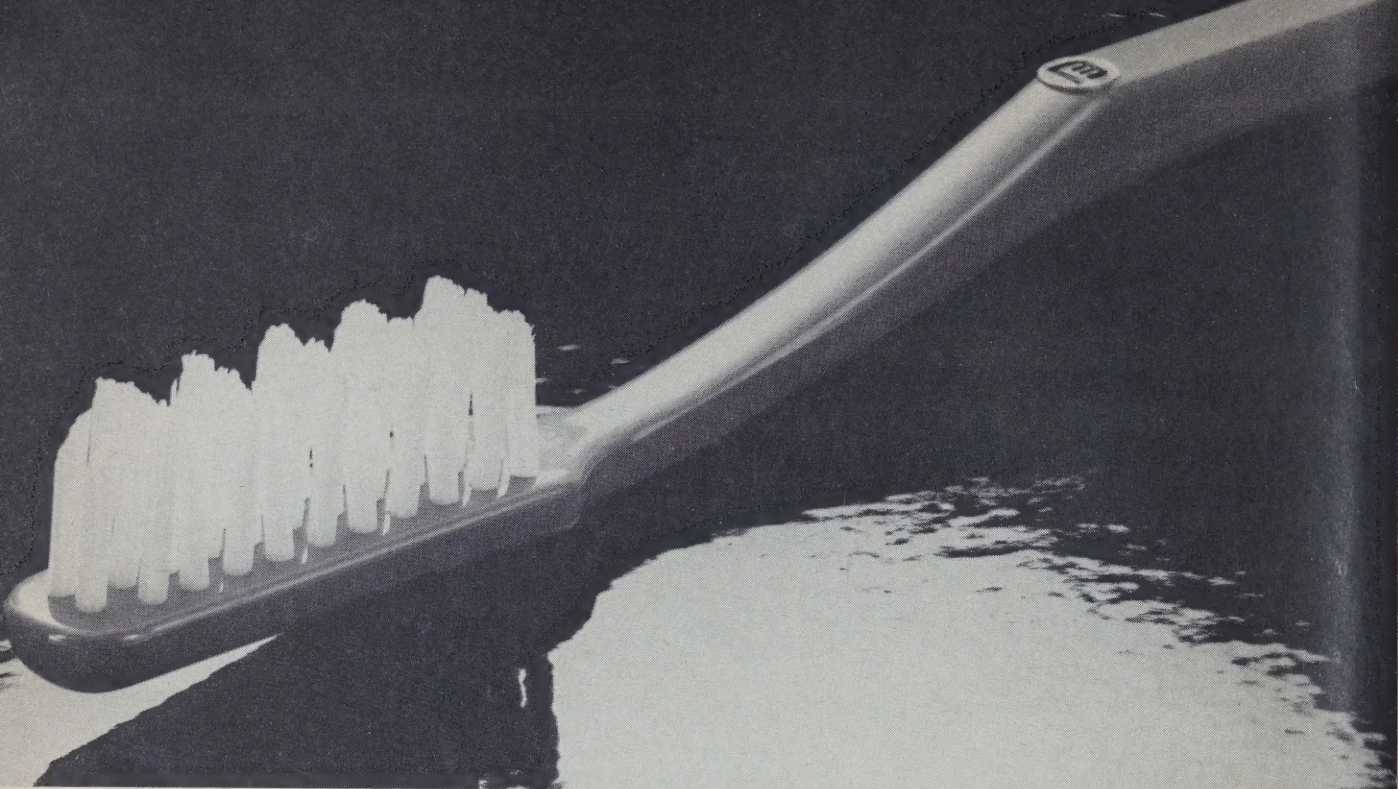
Two dental reports have been released recently by the Department of National Health and Welfare. The reports are entitled "Preventive Dental Services: Practices, Guidelines and Recommendations" and "Oral Radiological Services, Report of the Working Group". Both reports are available free of charge in French and in English. A good supply of the reports is available so that any order should be accommodated.

These reports are highly recommended reading for all practising dental hygienists, dentists, faculty and students. To obtain copies write to:

Mrs. S.B. French, Adviser, Dental Health Standards, Health Services Directorate, Health Services & Promotion Branch, Department of National Health and Welfare, Ottawa, Ontario, K1A 1B4.



Mr. Germ attacks Miss Tooth with pieces of felt.



Four recent studies* into relative toothbrush efficacy have proven the same thing. Jordan brushes best.

The Jordan V Soft. The Jordan V-tufted soft-bristle toothbrush was found to be the most efficient of all brushes tested in terms of plaque removal, particularly in interproximal margins.

V-Tufted Brushes. V-tufted toothbrushes were found to

remove plaque more effectively than straight-cut multitufted toothbrush designs.

Soft Bristles. Soft-bristle brushes remove plaque better than firmer textures, particularly when vertical brushing motions are used.

Time Spent Brushing. Not surprisingly, plaque removal was found to increase with time spent brushing.

Brushing Pressure. Also confirmed was that plaque removal is significantly enhanced with increased pressure of brushing.

Jordan

Designed to reach
where other brushes can't.

*Yankell, S.L., U Pa Sch Dent Med, Phila, Penn IADR Journal of Dental Research, Jan 79, Vol. 58, P. 239, Abstr 585
Nygaard-Østby, P., et al, Jordan as Oslo, Norway; U P Sch Dent Med, Phila, Penn.
Bergenholtz, A., Dept Periodont, U Umea, Umea, Sweden
Yankell, S.L. et al, U Pa Sch Dent Med, Phila, Penn.

FOR FURTHER INFORMATION, OR TO ORDER PROFESSIONAL SUPPLIES, WRITE TO: "THE JORDAN TOOTHBRUSH", C/O FRANK W. HORNER INC., P.O. BOX 959, STATION "A", MONTREAL, QUEBEC H3C 2W6, OR TELEPHONE (COLLECT) 514-731-3931.

HORNER
Montreal Canada

Invitation to the 8th International Symposium

Dear Canadian Dental Hygienists,
Members of the British Dental Hygienists' Association are looking forward so much to welcoming you to Brighton, England for the 8th International Symposium on Dental Hygiene. We have a stimulating programme for you and afterwards a superb social programme. To this we add our own warm welcome to you as friends and fellow professionals and the opportunity to visit the U.K.

You may or may not remember that the American Dental Hygienists' Association started International Symposia way back in 1970 and they sponsored the first four, in Rome, Montreux, London and Amsterdam. Following this the other National Dental Hygienists' Associations in Japan, Sweden and

Canada welcomed us to their countries. Now it is our turn and we look forward very much to seeing you in the U.K. from July 28th - 31st, 1981.

Yours sincerely,

Jean Bailey
President B.D.H.A.

Wendy Leech
B.D.H.A. Official Representative
to the International Liaison
Committee

Direct all enquiries through your National Association OR Conference Travel of Canada Ltd. 11 Adelaide Street West, Suite 903, Toronto, Ontario M5H 1L9 (416) 364-0625.

WAS THIS JOURNAL CORRECTLY ADDRESSED?

Every copy of the journal returned to us costs the Canadian Dental Hygienists' Association approximately fifty cents. If you are moving permanently, please let us know two months before changing your address. If the address label on this publication is not correct, please clip it, then paste it in the blank provided and mail this entire coupon to us, including your new address! Thank you.

Name _____
Address _____
City _____
Province _____
Postal Code _____

Mail to: Jo Gardner, CDHA Membership Chairman
1125 West 54th Avenue
Vancouver, B.C. V6P 1N3

Alternatives for the Dental Hygienist: A Special Series

As a special addition to our 1981 issues, we will be presenting reports written by Canadian hygienists who are either working in non-traditional environments or are performing non-traditional tasks in relation to their jobs.

Not all of the employment situations which will be featured are realistic opportunities for every Canadian hygienist due to differences in geographical location, municipal facilities, practice restrictions, education requirements, availability of funding, and personal preferences. Not all the job situations are full-time positions, nor do they all reap salaries comparable to the wages of a private practice dental hygienist. They represent alternative ways in which your dental hygiene training may be used and demonstrate how an unusual working environment, different co-workers, and special groups of patients can lead to a variety of responsibilities and to a satisfying job experience.

We hope that this series will entertain you, stimulate your interest, and perhaps even motivate you to investigate the possibilities of directing your career in dental hygiene into one of these areas. The first article in this series begins on page 17.

UIC Benefits for Part-time Hygienists

Our Manpower and Utilization Chairman, Elaine Good, is pleased to announce that the stipulations for eligibility for UIC benefits have been changed to the advantage of part-time hygienists. The unemployment insurance guide for employers now states that "under Regulation 13 as amended effective January 1, 1981, there are still two methods of establishing the minimum insurable requirements for an employee on a pay period basis. However, the distinction between the methods of remuneration has now been removed. In cases where an employee works less than the minimum weekly 15 hour requirement and has less than 20% of the All Canada maximum weekly insurable amount of \$315.00 which is \$63.00, such employment is excepted. It is necessary to fall below both of the minimum requirements in order to be in EXCEPTED employment for U.I. purposes." In other words, if you work 15 hours per week for an employer or earn \$63.00 per week for one employer you must contribute to the Unemployment Insurance plan.

Letters

Dear Editor:

Enclosed is a photo for your future front covers of "The Canadian Dental Hygienist". An interesting story lies behind this photo. It was taken in 1973 while instructing the first full-time dental assistant students at Georgian College of Applied Arts and Technology in Orillia, Ontario. Dr. Vernon Herron, director of the course, herein, was explaining dental anatomy. Dr. Herron and his partner, Dr. Douglas Ledlow, had initiated this program and had participated very enthusiastically in it. Unfortunately, one month before the course was to begin, Dr. Ledlow passed away suddenly of a heart attack. Greatly saddened by this event, co-workers became inspired to provide the best program, knowing that Dr. Ledlow would have wanted it that way. But within three months of his friend, Dr. Herron died suddenly of a heart attack.

The teaching and personality of Dr. Herron were well received, if those happy faces in the photograph are any indication. I think this photo should be dedicated to the memory of Dr. Herron and all teachers in dental auxiliary programs who give of themselves whole heartedly for the betterment of their fellowman.

Yvonne Birrell, R.D.H., R.N.
(former dental assistant
co-ordinator, Georgian College)

Editor's note: The photograph could not be used as a cover photo since it is not in colour. Submissions of colour prints, slides, or graphics will still be accepted by the editor for consideration for future journal covers.



Dr. Herron demonstrates dental anatomy to Georgian College assisting students.

Newsline □ □ □

Meet your treasurer

Your 1980-81 CDHA Treasurer is Linda Ann Wiens, a 1974 graduate of the University of Manitoba's dental hygiene program. Following graduation Linda worked in a general dental practice in Nova Scotia for 18 months before returning to her native province of Saskatchewan, where she has been employed in a group dental practice for the past four years. Linda has served as SDHA's Membership Committee Chairman since 1977 and still holds this position along with carrying out her respon-

sibilities as Treasurer. Linda's extracurricular activities include reading, downhill skiing, jogging, and making all types of handicrafts.



Mary Ann Wiens.

Are you an undiscovered graphic artist?

Do you have any ideas or designs that could be used in developing a logo for our Association? Any and all suggestions would be welcomed by:

Mary Anne Wailing,
CDHA Secretary,
Box 221,
Young, Sask., S0K 4Y0

Self-assessment test

The 1981 series of Self-Assessment Tests are provided by dental hygiene educators at Dalhousie University, Halifax, Nova Scotia. The first test reviews **Fluorides**.

When you have completed the test, turn to page 24 for the correct answers.

1. Systemic fluoride reaches the tooth
 - (a) only in the first few years of life
 - (b) only during the process of mineralization
 - (c) during mineralization and post mineralization during the pre-eruptive stage
 - (d) none of the above
 2. When systemic fluoride is discontinued
 - (a) there is no effect on the erupted teeth
 - (b) unerupted teeth show decreased amounts of fluoride
 - (c) protection may diminish or disappear
 - (d) erupting teeth show increased caries rates
 3. The major dietary sources of fluoride are
 - (a) whole grains
 - (b) tea and fish ✗
 - (c) beer
 - (d) all of the above
 4. School drinking water fluoridation
 - (a) has been demonstrated to be effective in controlling dental caries
 - (b) can be utilized in areas without communal water supplies
 - (c) can be adjusted to 4 to 6 ppm F
 - (d) all of the above ✗
 5. Indications for home topical fluoride applications are
 - (a) high or rampant caries rates
 - (b) significant decalcification
 - (c) generalized or localized tooth sensitivity
 - (d) all of above ✗
 6. In the prevention of radiation caries, which has proved effective?
 - (a) daily self-application of fluoride gel in custom fitted plastic trays, for a specified period
 - (b) daily brushing, allowing stannous fluoride - glycerol preparation to dry on teeth
 - (c) rinsing with a 3% NaF solution followed by NaHCO_3 - NaCl solution three times a day
 - (d) all of the above ✗
 7. For children between 2-3 years of age, who have no other significant sources of fluoride, what concentration of fluoride tablet is recommended?
 - (a) 0.5 mg. per day
 - (b) 2.0 mg. per week
 - (c) 1.0 mg. per day ✗
 - (d) none of the above
 8. The recommended time period for administration of fluoride supplements is
 - (a) 2-8 years
 - (b) soon after birth until the second permanent molars have erupted ✗
 - (c) in the first four years of life
 - (d) none of the above
 9. To prevent a child's accidental swallowing of a lethal dose of fluoride, it is recommended that
 - (a) no more than 100-120 tablets (100-120 mgF) per bottle be stored at one time
 - (b) no more than 100-120 cc solution (100-120 mgF ion) be stored
 - (c) both of above ✗
 - (d) none of above
 10. There is some evidence to suggest that the effectiveness of systemic fluoride
 - (a) is enhanced if it is ingested in one single dose
 - (b) is enhanced if it is ingested in small amounts over extended periods of time ✗
 - (c) is unaltered by single dose or by several small amounts
- Suggested References:**
- Continuing Evaluation of the Use of Fluorides*, edited by Johansen, Taves, Olsen, 1977, Westview Press, Boulder, Colorado.
- "Fluoride Supplements for Prophylaxis of Dental Caries," G. Nikiforuk, Faculty of Dentistry, University of Toronto.
- Glenda M. Butt, R.D.H., B.A.,
Lecturer, School of Dental Hygiene
Dalhousie University

Career Options in Dental Hygiene

Kate MacDonald, R.D.H., B.S., M.Ed. and
Margaret Miller, R.D.H., B.A.

□ □ □

The CDHA is re-evaluating whether dental auxiliary education should be based on the C.O.P. (career options) system. This article outlines how the system has developed in each province.

□ □ □

In July 1979, the board of directors of The Canadian Dental Hygienists' Association directed their representatives to the Canadian Dental Association Council on Health Care and the Council on Education to jointly prepare an evaluation of the C.O.P. System.¹ The CDHA had initially endorsed the C.O.P. System in principle, but since their endorsement, the system had developed in different directions and a re-evaluation was necessary.

Canadian hygienists have long recognized the need for building career opportunities through advanced and expanded levels of education and continuing education. The need for increased delivery of health care has, in some areas of the country, provided for the growth and expansion of dental hygiene. In other areas new auxiliaries have been created. This has resulted in a mismatch or overlapping of dental auxiliary functions without well-defined domains of operation. Some provincial dental associations, in collaboration with auxiliary representatives, have attempted to design a system whereby auxiliaries fit into a pattern and, through further or continuing education, may expand or grow.

Dental auxiliaries have often been referred to as being over-trained and under-utilized. Their period of participation in the labour force has been described as five years or less.² Lack of mobility, performing boring, repetitious procedures, inability to proceed from one level of practice to another, and inflexible educational systems have been expressed as reasons for leaving the work force.^{2, 3} More recent evidence suggests that approximately 80% of Canadian dental hygienists are employed in dental hygiene.⁴ Therefore, the opportunity to expand knowledge and skills and the ability to advance within the profession must be considered.

REVIEW OF THE LITERATURE

In 1959, a WHO Expert Committee of Auxiliary Dental Personnel published a report which would provide information on the utilization of auxiliary dental personnel to governments and other organizations responsible for community health programs. This committee recommended that countries without dental care programs should consider developing a dental health team to meet their specific needs. For countries already conducting a dental health care program, the committee recommended extending the role of auxiliaries.⁵

In 1968, the Minister of National Health and Welfare announced the formation of an Ad Hoc Committee to study all aspects of dental auxiliaries, especially as to their contribution toward better dental health for Canadians. This committee recommended that permissible duties of dental hygienists be expanded and that duties of the chairside assistant encompass many of the present routine technical duties of the hygienist. It was recognized that there was no need for the creation of a new auxiliary, but that the roles of dental auxiliaries should be increased and diversified. The committee also advised that the education of auxiliaries could be a function of Community Colleges, Institutes of Technology, and the CEGEPS, while existing university courses could be expanded by one academic year to train hygienists as teachers of auxiliary programs and for the many specialized functions in the field of public health.⁶

Canadian hygienists viewed this report as a key to broadening the scope of their responsibilities and as a challenge to contribute more directly to the total dental effort in Canada. The proposal of Canadian baccalaureate programs in dental hygiene would offer new opportunities for continuing education and employment. Advanced education and expansion of duties would enable diploma level hygienists to move up the educational ladder, if they chose to.⁷

Auxiliaries favour the concept of beginning with a basic auxiliary education and continuing vertically to a dental degree.

In the same year, the CDHA endorsed the Dental Hygienist's Section of the Canadian Public Health Association Report, titled "Recommended Qualification Requirements and Minimum Salaries for Public Health Personnel in Canada". It was recommended that a fuller career structure be developed for public health hygienists. The CDHA endorsed expanded responsibilities in consultative, supervisory, and administrative fields, as well as in clinical areas. It was indicated that these expanded duties be put into force as soon as possible.⁸

In 1974, the Canadian Dental Association held a Conference on Dental Auxiliaries in Banff. There was input from over one hundred participants, representing a broad range of experience and interest. They discussed the dental professional's responsibility of modifying the dental delivery system in order to meet the needs of the public. Some major considerations emerged from that meeting and of particular significance was the need to develop a new educational pattern to provide vertical and lateral career development for dental auxiliaries. It was also suggested that provincial legislation on auxiliary functions be standardized and that accreditation of all Canadian auxiliary programs be carried out to achieve nation wide mobility of trained dental auxiliaries. Auxiliaries favoured the concept of beginning with one type of basic auxiliary whose educa-

tion could continue vertically to a dental degree. If the auxiliary wanted to learn expanded duties in a dental specialty, lateral career training would be available.^{3, 9, 10}

This Banff Conference stimulated a great deal of interest, but action was limited. As a result, the Canadian Dental Association Health Care Council called a meeting of responsible provincial dental association representatives to review their positions regarding dental auxiliaries, develop a nationally acceptable Dental Auxiliary Training Program Model, and make some definite recommendations to the Health Care Council. At this meeting, the concept of the Career Options System was accepted, and functions at each core level and module were listed.

This meeting was held in May 1975, and the Council agreed to specific criteria that a C.O.P. System must demonstrate: vertical and lateral mobility; advanced standing for past experience, i.e. challenge exams; identification of common core areas of knowledge; specialty areas taught as continued education rather than as part of core areas; the introduction of a mastery concept at all levels; and multiple entrance opportunities. In the development of a model for a C.O.P. System, minimal requirements and guidelines, including defined objectives and evaluation criteria, were to be established for each level. It was agreed that a modular approach to curriculum design which utilized self-instructional materials would be incorporated wherever possible.

ROYAL CANADIAN DENTAL CORPS

Prior to the Ad Hoc Committee on Dental Auxiliaries Report, the Royal Canadian Dental Corps already utilized a program whereby auxiliaries could move vertically within its structure, and it is still in use today. A basic dental assistant course is available for all personnel upon enrolment into the Corps. Through on-the-job training and courses at the RCDC School, an auxiliary moves vertically through levels till he or she becomes a clinical supervisor.¹¹ Duties are outlined for each level. After becoming a clinical supervisor (usually a six year process), the assistant may apply for dental hygiene training. If accepted and successful in the program, several years may be spent as a hygienist, after which the hygienist may apply for training in restorative duties as a dental therapist. At the present time, the dental therapist is the last clinical category and carries with it the rank of Warrant Officer. The top hygienist rank is also Warrant Officer. If further progress is desired to the officer ranks, one usually seeks an administrative position and may be sent to a university for degree qualifications.

THE MARITIME PROVINCES

In 1971-72, expanded functions in restorative dentistry were incorporated into the 2-year Dalhousie dental hygiene curriculum. In 1969, special training in restorative procedures was provided at the Faculty of Dentistry, Dalhousie University, Halifax. Three dental hygienists were taught expanded duties in restorative procedures in a two-and-one-half month program. This program was the beginning of a two-and-one-half year study to determine whether expanded duty hygienists could increase productivity in the dental office.¹² It was shown that productivity did increase, and it also demonstrated that expanded duties could be taught to the traditional dental hygienist in a short period of time.

Prince Edward Island has a system of career options for assistants. The basic dental assisting course is given at Holland College. Assistants may opt to take an additional module in intra-oral procedures at the College. Restorative hygienists are utilized in the dental public health program.

New Brunswick has a similar dental public health program. Each auxiliary works with a dentist in teams providing dental services for children in rural areas.



Courtesy of the R.C.D.S. of Ontario and Algonquin College, Ottawa.

BRITISH COLUMBIA

A Career Options System approach to the education of dental personnel in British Columbia was proposed in 1975 and received general province-wide support. It was considered significant in providing a constructive step toward more effective delivery of dental services in British Columbia and as a means of resolving problems relating to dental auxiliary education, licensure, and practice.² Two levels of auxiliaries with clinical functions were outlined. Each level had a core educational program with modules available.² In 1978, two modules were added to Level I: the Endodontic Module and the Public Health Module. In 1979, the System was once again updated with a revision of clinical functions of all dental auxiliaries in British Columbia. The C.O.P. System has again been updated, the most recent development being the definition of the competencies required for dental hygiene practice in the province.

ONTARIO

The Health Disciplines Act, 1974, resulted in some significant changes to dental hygiene in Ontario. The number of education programs was increased, duties were expanded (although in a limited fashion), and a career ladder mechanism was established, allowing an uncertified dental assistant to progress to the level of a dental hygienist with restorative skills. However, no means was established to allow for further expansion of duties into some other areas recommended at the CDA Conference on Dental Auxiliaries.³

Due to a heightened public awareness of the importance of dental health and a rapid increase in the utilization of dental insurance plans, Ontario was asked to cope with a growing demand for dental services. Since a variety of dental auxiliaries were available, there appeared to be a need to determine the most practical and effective role for Ontario dental auxiliaries to assume.^{13, 14} In January 1975, a report on the classes, duties, and training of dental auxiliaries in Ontario was prepared. It included several recommendations which related to dental auxiliary career mobility in Ontario, proposing that an integrated program with a ladder of educational progression be adopted for the training of auxiliaries. It was also recommended that presently qualified auxiliaries be given the opportunity to enrol in upgrading courses. A structure was designed to facilitate moving from one level of auxiliary to another and to provide an avenue for upgrading.¹³ Duties and functions at each level were outlined.^{3, 13} This ladder system would promote mobility and permit auxiliaries to achieve greater responsibility and increased compensation through additional knowledge and skills without having to make a career change. It was thought that by building mobility into the educational system, career oriented individuals would be attracted to the auxiliary programs.¹³

The Health Disciplines Act, 1979, presents two categories of auxiliaries, the dental assistant and the dental hygienist. Only two educational institutions offer the restorative module for dental hygienists, alternating annually. The majority of those who complete the first year program, dental assisting, desire to go on to the second year, dental hygiene, but they must compete with applicants from the work force. Some colleges reserve space for their students, some require work experience prior to returning to the college, and some offer dental hygiene only every other year.¹⁵ A mechanism does exist by which assistants in the work force may apply for admission into a dental hygiene program.

A post diploma degree program for dental hygienists was initiated at the University of Toronto in 1976 with the objective of educating hygienists for teaching, research, and public health administrative positions. Enrolment is limited and Grade 13 is a requirement which is not necessary for acceptance into

community college dental hygiene programs. This prerequisite is incongruous with the career ladder concept and appears to offer little realistic mobility to most Ontario hygienists.³

SASKATCHEWAN

A dental hygiene pilot program began in Saskatchewan in October, 1979, whereby the Saskatchewan dental nurse, through a 7-9 month program, may become a hygienist. Consideration is being given to accept Level II intra-oral assistants into the program.

MANITOBA

The Manitoba Dental Association accepted, in principle, the report of the CDA Conference on Dental Auxiliaries. They utilized the concept as a framework by which to evaluate and plan auxiliary training in Manitoba. In some areas, alterations were made to reflect local needs and preferences. Auxiliaries and their duties were outlined.

Manitoba dental auxiliaries include a Phase I Level, Phase II Level, Dental Hygienist Level, and Dental Nurse (Saskatchewan trained) Level. Some modules of training have been established whereby auxiliaries may further their education without having to withdraw from the work force for an extended period of time. Modules are restricted to auxiliaries with a specific level of training. To date, vertical mobility exists only from the Phase I to Phase II level.

Challenge exams are available to on-the-job trained chairside assistants to achieve Phase I recognition. Dental nurses have been accepted into the University of Manitoba, School of Dental Hygiene with advanced standing in some courses and have successfully challenged the restorative course.

RECOMMENDATIONS

1. The C.D.H.A. accepted, in principle, the C.O.P. System concept as defined by the C.D.A. following the May 1975 C.D.A. Health Care Council Meeting. The C.D.H.A. should reassess its position.
2. The acceptable C.O.P. model should allow for an easy exit and an easy point of re-entry. At all times, the potential for vertical mobility should exist; thus, an individual could return to the System, undergo refresher experience or learn new skills, and proceed upwards.
3. Lateral as well as vertical mobility should be an integral part of a C.O.P. System. Titles, names, and basic training of all auxiliaries should be the same across Canada. This would facilitate geographic mobility. Each province's particular needs would determine optional training.
4. Evidence of prior education and experience, in both clinical skills and related knowledge, should be challenged through entry level testing and credit should be given.
5. Dental hygienists should consider options beyond the dental field. The field of education would provide educators in Dental Assisting, Dental Hygiene, and Dentistry programs.
6. With the growth of dental auxiliary programs across the nation, the C.D.H.A. must encourage the development of Baccalaureate Degree programs in Dental Hygiene and Masters Degree programs in areas such as educational administration and public health.
7. Dental hygienists can acquire more career options and a greater degree of vertical mobility by expanding their expertise and usefulness in the area of community dental health workers within the legal confines of dental hygiene practice. In this role, the hygienist could be active as an administrator, researcher, community educator, and resource person.

8. There is a need to enhance the role of the dental hygienist in public health. Some provinces see a role for the hygienist in their dental public health programs, some do not fully utilize them, while others do not employ them at all. A more involved clinical role would permit the delivery of more dental services at a reduced cost to the community. Dental hygienists with restorative skills could be trained in the duties of the Saskatchewan dental nurse. The reverse is now true in Saskatchewan.
9. Canadian hygienists, through their provincial and national organizations, must take the initiative to present progressive, long-term, professional goals and work to convince the dental profession of their needs. The potential for dental hygienists to become a stronger force in the future delivery of dental care should provide the impetus.

C.D.H.A. POSITION

The C.D.H.A. continues to support the C.O.P. System with the assignment of functions at basic core levels of training and extended modules. In concert with the C.D.A. and auxiliary groups, the C.D.H.A. should pursue long-term goals to ensure vertical and geographic mobility, opportunities for undergraduate and graduate study, and the extension of career options to include administration, research, education, community health, and public health responsibilities.

REFERENCES

1. Transactions of the Canadian Dental Hygienists' Association/L'Association Canadienne Des Hygienistes Dentaires. Sixteenth Annual Meeting of the Board of Directors, Vancouver, British Columbia, 1979.
2. Conklin, J.T. and Voris, J.S. Cop system: An Educational Proposal. *The Canadian Dental Hygienist* 9:4, Winter 1975.
3. Jones, L. Career Patterns of Dental Hygienists in Ontario. The Ontario Institute for Studies in Education. An Unpublished Thesis, 1978.
4. Johnson, P.M. and Jones, L. The Dental Hygiene Data Bank: Update on the Results of the Statistics Canada Survey of Canadian Dental Hygienists. *The Canadian Dental Hygienist* 13:4, Winter 1979.
5. Butler, N.P. Operating Dental Auxiliaries - An Analysis of Progress? *Quintessence International* 6:2, 1975.
6. Ad Hoc Committee on Dental Auxiliaries, Report. Ottawa. Information Canada, 1970.
7. Twibble, L. Panel Discussion on The Ad Hoc Committee Report on Dental Auxiliaries. *The Canadian Dental Hygienist*. Fall 1971, 32-33.
8. A Career Structure for Dental Hygienists. *The Canadian Dental Hygienist*. Fall 1971, 36.
9. C.D.A. Conference on Dental Auxiliaries. Canadian Dental Association, 1974.
10. C.D.A. Conference on Dental Auxiliaries: Viewpoints. *The Canadian Dental Hygienist* 8:1, Spring 1974.
11. Baird, K.M. et al., Employment of Auxiliary Clinical Personnel in the Royal Canadian Dental Corps. *Journal of the Canadian Dental Association* 33:4, 1967.
12. Romche, R.G. et al. Use of Expanded Function Dental Hygienists in the Prince Edward Island Dental Manpower Study. *Journal of the Canadian Dental Association* 39:4, 1973.
13. Ontario. Report and Recommendations on the Classes, Duties and Training of Dental Assistants, Dental Nurses and Dental Hygienists in Ontario. January 1975.
14. Atkins, G.D. et al. Present Status of Ontario Dental Auxiliaries. *Ontario Dentist* 54:5 1977.
15. Ontario Dental Hygienists Association. Personal Correspondence, June 1979.

Fatal Incidents of Fluoride Intoxication

Adele Golinsky, R.D.H.

The Canadian and American Dental Associations, the World Health Organization, and related medical and scientific groups have recognized the value of fluoridation as a preventive public health measure.^{1, 2} The World Health Organization states that the only sign of physiological and pathological change in life-long users of optimally fluoridated water supplies is that they suffer less tooth decay.¹² Well-controlled studies demonstrating the importance of topical application of fluoride have repeatedly corroborated the efficacy and safety of fluoridation.³ Deaths due to the toxic effects of fluoride are rare. However, two deaths attributed to fluoride intoxication have occurred in North America in recent history and will be described and documented in this paper.

CASE ONE

On the morning of May 24, 1974 William Kennerly, a three-year-old boy, was taken by his mother for his first dental examination to the Brownsville Dental Health Center in Brooklyn, New York. William was examined by a dentist with the assistance of his dental nurse. Mrs. Kennerly observed the procedures carried out throughout the dental examination. Before leaving the operatory, the dentist directed his nurse to clean the child's teeth. Following the cleaning, the mother saw the nurse apply a dark coloured substance to the child's teeth. The nurse handed William a cup

of liquid but failed to instruct him to rinse only and then expectorate. Instead, the child drank some of the liquid from the cup and gave the cup back to the nurse. The nurse, who was engrossed in conversation with a co-worker, failed to notice that the child had swallowed some of the liquid. She again gave the cup to the child and he consumed the remainder of its contents. (The contents of the cup were described in the Brookdale Medical Center report as 45 cc of 2% stannous fluoride.)

After the child finished the liquid, he was removed from the chair. The nurse told Mrs. Kennerly that William did not have any cavities and that his treatment was completed.

While the mother and child were preparing to leave, the child complained of headache, dizziness, stomach ache and nausea. The child vomited and began to sweat profusely. Mrs. Kennerly told the nurse that the cup had contained something which made the child ill. The nurse directed Mrs. Kennerly to see a pediatrician at the Brookdale Ambulatory Pediatric Unit which was located on the same floor.

After extensive delays, William Kennerly was seen by a doctor. The child had lost consciousness and had no detectable pulse. After resuscitative measures were applied, the child was transferred to Brookdale Hospital where once again many delays were encountered before the child's stomach was pumped. While Mrs. Kennerly was completing admission procedures, the doctor came down

to advise her that her child had died at two o'clock while being treated.

An autopsy was performed by the Medical Examiner's Office and the cause of death was determined to be fluoride poisoning. Ninety milligrams of fluoride would have been the toxic dose for William Kennerly who weighed 14.7 kilograms. The 45 cc of 2% stannous fluoride ingested by this child represented 250 milligrams of fluoride ion, almost three times the toxic dose.⁵

William Kennerly's unfortunate demise could have been prevented if the correct method of fluoride application had been used. Of the two components in the preventive regimen used, only one is recommended by any responsible authority or health agency. Application of a stannous gel by swabbing the child's teeth following a prophylaxis would have been adequate as a caries preventive measure for this three-year-old. There was no need to give the child the cup of liquid. Furthermore, the nurse was remiss in her duties because she was not giving her full attention to the treatment of the child, but was engrossed in conversation with a co-worker. Giving the child the unnecessary cup of liquid and failing to instruct him not to drink, but to rinse and expectorate the liquid, resulted in the child's ingestion of a lethal level of fluoride.

□ □ □

The nurse failed to recognize that headache, dizziness, stomach ache, and nausea were warning signals of possible fluoride poisoning.

□ □ □

Despite the child's sudden illness, the staff failed to take any medical steps to determine the nature of the illness or to treat the symptoms. Failing to recognize the signs and symptoms of fluoride poisoning, the nurse should have consulted the dentist. Instead of informing the dentist of the situation, she advised the mother to take the child to the neighbouring pediatric care unit, but then failed to alert the clinic of the child's previous dental treatment. Had this been done, the clinic would have been prepared for the ill child and emergency measures could have been initiated immediately.

Even so, treatment for fluoride poisoning should have commenced in the dentist's office. The child's vomiting and weakness should have suggested to the staff a possible ingestion of a toxic substance. Since the child had already vomited, an antidote in the form of a soluble calcium salt should have been administered. The preparation most frequently available is milk. Lime water or preparations containing large amounts of aluminum or magnesium such as Maalox also can be used. All of these cations form relatively insoluble

salts with the fluoride ion and minimize the absorption of the fluoride through the gastrointestinal mucosa.⁶

Since a prolonged period had elapsed before the child was cared for at the hospital and absorption had already occurred, an intravenous solution of 10 mls. of 10% calcium gluconate should have been administered in preference to the shock therapy. In this case, the order of treatment was incorrect. Resuscitative measures and shock therapy should have been secondary to intravenous calcium gluconate therapy as neutralization of the ingested fluoride was of prime importance.^{7, 8} Failure to follow any of the recommended emergency treatments (i.e. stomach lavage to completely remove the toxin from the system, calcium treatment, etc.) and allowing the poisonous fluoride to remain in the child's body for an additional two and one-half hours contributed to the death of the child.

The staff at the Brownville Dental Health Center were charged and found guilty of negligence, malpractice, and abandonment. The Brookdale Ambulatory Pediatric Care Unit and the Brookdale Hospital were also found guilty of malpractice and gross negligence in the treatment of this child.

CASE TWO

On Sunday, November 11, 1979, an employee at the Annapolis Maryland water treatment plant failed to close a valve to stop the flow of 22% hydrofluosilic acid from a 4000 gallon storage tank to a 50 gallon fluoride feeder container. As a result, the feeder container overflowed into drains which emptied into a tank of backwash water which was eventually recycled as raw water. About 1,000 gallons of hydrofluosilic acid was recycled into the city water supply before the accidental spill was discovered on the morning of Monday, November 12, 1979. The valve was immediately shut off and, although the filtration plant superintendent attempted to neutralize the fluoride by the addition of lime to the water supply, he failed to notify his supervisor and the County Health Department about the accident.

On Tuesday, November 13, 1979, eight patients became ill while receiving dialysis treatment at the Bio-Medical Applications Clinic. Their treatments were discontinued when the patients complained of chest pains, nausea, vomiting, and diarrhea. The patients were urged by clinic officials to go to hospital for treatment, but they refused to do so. That evening, patient Donald Konrad suffered a heart attack while enroute to the hospital. He was resuscitated and recovered. Following Mr. Konrad's attack, the dialysis center once again contacted the other seven patients and urged them to

enter hospital for observation. One patient, Mr. Blake, who refused to go to hospital, was found dead by his wife at three a.m. on Wednesday, November 14, 1979. Later that Wednesday, the dialysis center, suspecting that something was wrong with the water being used in their dialysis treatments, contacted the state health department. Still, no one had reported the accidental fluoride spill. Nearly a week later, a county health department inspector learned of the fluoride spill from a city employee. The water was tested and fluoride levels measured 35 parts per million. Samples of tissue and fluid from the dialysis patients revealed elevated levels of fluoride. Because of a series of errors and mistaken judgements by three water plant employees, a dialysis patient died from fluoride intoxication.⁹

Following a two-day investigation of the accidental fluoride spill, it was recommended that the City of Annapolis revise its fluoridation system to prevent similar accidents from occurring in the future. The investigating committee recommended that all filtration plant employees be retrained to familiarize themselves with the rules and regulations of the plant operation and to become cognizant with the federal law which requires the reporting of water quality programs to the health department.¹⁰ In the United States, the majority of dialysis treatments are given in special hospital centres and most of these use specially purified water for their artificial kidneys. However, in the case of the Annapolis Bio-Medical Applications Clinic where purified water was not used, it was recommended that tap water be de-ionized before being utilized in dialysis treatment.

□ □ □
The most beneficial level of fluoride in water used for long-term kidney dialysis patients has not been determined.

□ □ □
 A kidney dialysis patient's blood is washed in an artificial kidney two or three times a week for six to fourteen hours. In this process, chemicals added to about 300 quarts of water are used to purify the patient's blood during a dialysis session. The patient's bloodstream is exposed to about 900 quarts of water each week. Some clinicians have suggested that a small quantity of added fluoride may counteract undesirable bone demineralization that occurs in patients with kidney failure. There are some indications that from the 900 quarts of water which are used in treatment, dialysis patients can absorb fluoride, thereby increasing the storage of fluoride in the skeleton. And, since the 900 quarts of water each dialysis patient uses every week represents about 50 to 100 times the amount of fluid consumed by the average person, the Na-

tional Institute of Arthritis and Metabolic Diseases recommends that fluoride, as well as calcium, copper, iron, magnesium and other natural or added solutes, be removed from tap water before it is used in artificial kidney machines, thus preventing absorption during long-term dialysis. This may be accomplished by distillation or by passing the tap water through a de-ionizer.

It must be emphasized that there is a need to process water supplies prior to therapeutic use in large quantities for kidney dialysis. However, this has no bearing on the ingestion of optimally fluoridated water from community water supplies.

CONCLUSION

In the two case studies documented, the cause of death was fluoride intoxication. However, one can only conclude that the human factor was the chief culprit responsible for these fatalities; that is, the deaths due to the toxic effects of fluoride were inherent to human error, misjudgement, and gross negligence. Thus, it is incumbent upon all clinicians and technicians who utilize fluorides that they be conversant with the recommended dosages and the correct methods of administration in order that fatal incidents are prevented.

The author is a recent graduate of George Brown College and is presently employed in private practice in Toronto, Ontario.

REFERENCES

1. Bowen, L.H., Fluoridation Supporters, Canadian Dental Association, 4/1976.
2. Council on Dental Health, Some National Organizations in the United States Supporting Fluoridation, American Dental Association, 7/1971.
3. Newbrun, E., Cariology, Williams and Wilkins Co., Baltimore, 1978: 266.
4. Health League of Canada, Fluoridation Policy Statement of the Health League of Canada, World Health Organization, 4/1977.
5. Bidanset, J.H., Report compiled by the consulting Toxicologist of Nassau County, Nassau County Poison Control, 1979.
6. Modell, W., Drugs of Choice, The S.V. Mosby Co., St. Louis, 1966: 772.
7. Golinsky, B., Interview at Shoppers Drug Mart, Toronto, 3/1980.
8. Berger, E., Interview at Boots Drugstore Canada Ltd., Toronto, 3/1980.
9. Punch, L., Series of Errors, Mistaken Judgement in Annapolis, A.D.A. News: 8-9, 12/1979.
10. Kryzanowicz, M., Workers Punished for Spill, Annapolis Evening Capital, 12/1979.
11. Stewart, W., Fluoridation and the use of Fluoridated Water in Artificial Kidneys, U.S. Department of Health, Education and Welfare Public Health Service: 1-2, 3/1969.
12. Consumer's Union, Fluoridation - the Cancer Scare, Consumer Reports: 394, 7/1978.

Alternatives: Dental Hygiene in a Children's Hospital

Sylvia Vause, R.D.H.



Sylvia Vause starts off our series on non-traditional roles for the dental hygienist.

I have been employed as a part-time dental hygienist at Alberta Children's Hospital since November, 1977.

At the present time, I am responsible for conducting dental inspections and teaching dental health education in three main areas of the hospital: on the wards; in our school for handicapped children; and in our Cleft Palate Clinic.

On the wards, I check the child's chart to affirm written parental consent for a dental inspection. I then inspect the child's teeth, begin oral hygiene instruction, and send home to the parents a form letter stating the results of the dental inspection. Often the parents are present so that I am able to discuss proper oral hygiene and dental concerns with them. We have many orthopedic patients who remain at the hospital for some months which enables me to give them followup oral hygiene instruction.

We have three residential children with muscular dystrophy whom I take for their dental appointments. When the addition to our hospital is completed in 1981, we will have a clinic where these children will be able to receive treatment.

I perform annual dental inspections for the preschool and school children in our hospital school and I teach monthly dental health classes in this hospital school for handicapped children.

In the Cleft Palate Clinic, the director of our dental department, Dr. L.B. Smith, and one of our staff orthodontists diagnose the dental condition and recommend treatment. I see the patients and their parents for dental health instruction sessions where I emphasize oral hygiene, nutrition, and the use of fluorides. Besides myself, our Cleft Palate Team consists of an audiologist, nurse co-ordinator, nurse counsellor, otolaryngologist, orthodontist, pediatrician, pedodontist, plastic surgeon, social worker, speech pathologist, and consultants in the fields of genetics, psychology, and nutrition. These Cleft Palate Team members take part in education days for parent groups in order to educate the parents who, in turn, educate and counsel other parents of children who are born with this defect. In October, 1980, the Cleft Palate

Team made three presentations at the nursing in-service program to instruct the nursing staff about this condition and our mode of treatment.

In addition to these preventive duties, I perform administrative duties for the dental department in collaboration with Dr. Smith. This includes budget preparation, ordering supplies, and handling correspondence. Until we have a hospital dental clinic and a receptionist, I will answer all incoming mail from other hospital departments and from outside the hospital. When I do a dental inspection, I write the parents a form letter stating the child's dental condition. Departments within the hospital direct all dental correspondence to me. For example, if the finance department needs to know our requirements for continuing education and travel for the year or if a nurse notices that a child has a dental condition that requires attention, I will handle these requests appropriately.

When our dental clinic is completed, I shall continue with my present duties and also deliver clinical dental hygiene services. The dental department will then require a full-time hygienist.

Preparation for my current position began at the University of Manitoba, School of Dental Hygiene, where we wrote reports about dental care for patients with medical problems or disabilities and did practicums at the Winnipeg Health Sciences Center Dental Department, Winnipeg Children's Hospital, the Rehabilitation Center, and the hospital in Selkirk for the Mentally Retarded or Mentally III. Subsequent private practice experience,

further reading about specific medical problems, and discussions with other health professionals added to my background.

I would advise a dental hygienist who is interested in working with medically or mentally handicapped children to approach the dentist and the administration at a Children's Hospital, discuss her/his interests, and put forth suggestions for a preventive program. She/he could cite examples of other dental programs in hospitals and could contact dental hygienists working in hospital settings for input into their program.

I have also worked with staff and residents of group homes for the mentally retarded. A hygienist interested in working with this group of special patients could contact a group home and, upon permission, could assist in improving their oral hygiene status. She/he would get some practical experience while determining whether she/he indeed enjoyed this type of work. In addition, for anyone who is seriously interested in this field of dental hygiene, the University of Oregon in Portland offers a two month program called DECOD (Dental Care of the Disabled) which, I think, would prove to be most beneficial.

I enjoy my present duties of teaching dental health to patients, their parents, and staff, and I enjoy being responsible for the administrative duties of the dental department. I look forward to performing clinical duties in our new dental clinic and see this as a further learning experience in my dental treatment to handicapped children.

CALL FOR TABLE CLINICS

1981 CDHA Convention and Scientific Program

Calgary, Alberta

Aug. 30, 31, Sept. 1, 2

The 1981 CDHA Convention Committee invites members to submit topics for table clinic presentation to take place during the 1981 Convention. Deadline for submission of topics is MAY 1st, 1981. Please address your application to:

Convention Committee
c/o Molly Moore
331 - Pumphill Crescent S.W.
Calgary Alberta T2V 4M2

APPLICATION: C.D.H.A. 1981 TABLE CLINIC PRESENTATION

CLINICIAN(S) NAME(S): _____

ADDRESS: _____ PHONE: _____
office home

TITLE OR TOPIC: _____

Please provide a summary of the presentation
and specify equipment and space requirements.

Prophylaxis Prior To Topical Fluoride Application: A Questionable Procedure?

Stephanie Nagle, R.D.H., B.Sc.D.

Dental hygienists routinely perform a thorough prophylaxis with rubber cup and pumice before any topical fluoride application, since it is assumed that materia alba, plaque, and organic films on the teeth interfere with the deposition of fluoride into the enamel.^{1, 2, 3}

Knutson¹ was the first dental researcher to advocate the practice of completing a prophylaxis prior to the application of topical fluoride. He based his recommendation on the comparison of his work with Armstrong and Feldman⁴ to work done by Jordon and co-workers.⁵ Knutson's group did not pumice the teeth before the application of a series of sodium fluoride topicals⁴, while Jordon and his co-workers⁵ did employ polishing prior to the administration of the first of three sodium fluoride treatments. Comparison of these two studies indicated that Jordon's subjects exhibited a higher caries reduction. On this premise Knutson advised that a thorough prophylaxis be performed before the application of a topical fluoride.

In 1951 Chrietberg⁶ conducted the only clinical trial that can be identified in the literature which directly tests the difference in caries increments between subjects receiving a prophylaxis and those not receiving one prior to the administration of a topical fluoride treatment. One group of schoolchildren received a professional prophylaxis,

while another group was given two weeks of supervised brushing preceeding fluoride treatments. No significant difference in caries reduction was observed between the groups. Chrietberg proposed that similar results would be achieved if the toothbrushing procedure was reduced to a thorough brushing just before the fluoride treatment. Unfortunately, no controlled clinical trial has been conducted to test this theory*; however, the question of the necessity of a professional prophylaxis prior to a topical fluoride application has sparked some recent discussion and laboratory research.

THE PELLICLE AND FLUORIDE UPTAKE

It is agreed that a pumice prophylaxis removes dental plaque and some or all of the adherent

* A one-year study conducted by Haas (J.A.D.A. 71:1391, 1965) showed a 30 per cent reduction in the number of new carious lesions in children's teeth following two weeks of supervised toothbrushing preceeding single applications of stannous fluoride as compared to a control group receiving applications of the local tap water. Although the caries reduction was impressive, the study tested the efficacy of stannous fluoride in reducing decay, rather than testing the difference between toothbrush cleaning and a pumice prophylaxis prior to topical treatment.

pellicle along with 3-4 u of fluoride-rich surface enamel.⁷ Toothbrushing removes dental plaque, but seems not to remove the acquired pellicle.^{8,9} Therefore, the critical question when considering the need for a prophylaxis is whether the acquired pellicle reduces the uptake of fluoride by the enamel. Tinanoff¹⁰ proposes that "if acquired pellicle does not reduce the uptake of fluoride significantly, then a re-evaluation of the necessity of the prophylaxis in patients is justified." He suggests that the time required to perform a prophylaxis could be better spent teaching the patient proper toothbrushing techniques.

□ □ □

It has been proposed that "if acquired pellicle does not reduce the uptake of fluoride significantly, then a re-evaluation of the necessity of the prophylaxis in patients is justified."

□ □ □

Data on the uptake of fluoride through pellicle are contradictory. Aasenden, Brudevold and McCann² showed an increase in fluoride deposition *in vitro* by first removing organic material from surface enamel. It was suggested by these researchers that organic material might interfere with reactive sites on the apatite crystals.

On the other hand, *in vitro* evidence concerning the noninhibitory role of the pellicle in fluoride uptake has been demonstrated by Birkeland and Rolla.^{11, 12} These investigators reported that components of the pellicle had no capacity for binding fluoride and, therefore, did not affect the affinity of fluoride for enamel.

In a study involving electron microscopy, Rosinsky, Schroeder and Muhlemann¹³ observed calcium fluoride precipitates indicating the reaction of fluoride with enamel after a fluoride treatment had been administered in the presence of artificial pellicle.

Furthermore, an *in-vitro* study conducted by Joyston-Bechal, Duckworth and Braden¹⁴ showed that artificial pellicle did not affect the mechanism of F uptake by human enamel after 4 minutes of exposure to fluoride solutions of Na¹⁸F and AP¹⁸F, although the authors noted that, when teeth were treated for 100 minutes with AP¹⁸F solution, the presence of artificial pellicle interfered with F uptake.

Tinanoff, Wei and Parkins¹⁵ recorded a reduction in the initial uptake of fluoride into the enamel surface in an *in vitro* study; however, in an *in vivo* study by the same investigators¹⁰, no inhibition of fluoride uptake was reported following a topical fluoride application in the presence of natural pellicle. The authors interpreted these results as indicating that the pellicle may reduce the initial uptake of fluoride into the tooth, yet it may also

retard the fluoride enamel reaction products (calcium fluoride and fluorapatite) from diffusing out.¹⁶

DENTAL PLAQUE AND FLUORIDE UPTAKE

The question as to whether dental plaque acts as a barrier to the diffusion of fluoride into enamel has also been raised. Joyston-Bechal *et al*¹⁴ and Kirkegaard and colleagues¹⁷ have reported that artificial plaque produced by incubation with streptococci did not reduce the fluoride uptake by enamel *in vitro*.

Birkeland and Rolla^{11, 12}, working with powdered hydroxyapatite crystals, have demonstrated that plaque components, such as bacteria, proteins, dextrans, and salivary coatings, exhibited no measureable amount of binding with fluorides.

Bruun and Soltze¹⁸ further support these findings through their work with a newly developed biopsy method. This group took small biopsies from premolars to measure the fluoride uptake in the outer enamel after a single topical application of neutral sodium fluoride or amine fluoride. The topicals were applied to both cleaned and plaque-covered teeth. The presence of plaque seemed to enhance the deposition of fluoride on application of the neutral sodium fluoride, while similar amounts of fluoride were taken up by the cleaned and plaque-covered teeth receiving the amine fluoride treatment. These authors suggested that the plaque retarded the amount of fluoride leached away following a topical treatment, thus increasing the fluoride uptake by prolonging the exposure time of enamel to fluoride trapped in the plaque. They concluded that "the plaque-accumulating areas on the enamel, which usually coincide with the most caries-susceptible sites (eg. fissures and proximal surfaces) [may] benefit more from topical NaF applications performed without pre-cleaning the teeth."¹⁸ While this hypothesis would

□ □ □

Some investigators have suggested that the rubber cup prophylaxis should be a more selective procedure.

□ □ □

have to be tested clinically, it has been shown that dental plaque retained considerable amounts of fluoride hours after topical treatments¹⁹ and that voluminous plaque deposits related positively with elevated fluoride concentrations in labial enamel surfaces of schoolchildren.²⁰

But before totally altering our clinical practice carefully controlled clinical trials will have to be conducted to fully investigate whether the dental prophylaxis can be deleted from the traditional topical fluoride procedure without reducing the

cariostatic benefits. Until this evidence is evaluated, the Report of the Working Group on Preventive Dental Services in Canada has recommended that one must continue to require that a prophylaxis should precede a professionally-applied fluoride solution or gel, except for individuals who are able to carry out a thorough self-prophylaxis under supervision.²³

Recently, some investigators have advised that the rubber cup prophylaxis should be a selective procedure for those patients with severe staining of the teeth and that for children, supervised flossing and toothbrushing with a fluoride-containing paste prior to the topical application of fluoride may be substituted for a professionally administered prophylaxis.²² This approach minimizes the extent of tooth structure removed through rubber cup polishing with an abrasive paste²⁴, while maximizing the time available to the operator for mouth care instruction. The patient is no longer a passive recipient of a dental service, but an active participant, which can only lead to greater patient awareness of the importance of plaque control.

The author is the CDHA editor and is currently working in a periodontal practice in Windsor, Ontario.

REFERENCES

1. Knutson, J.W. Sodium fluoride solutions: Technique for application to the teeth. J.A.D.A. 36:37-39, 1948.
2. Aasenden, R., Brudevold, F. and H.G. McCann. The response of intact and experimentally altered enamel to topical fluoride. Arch. Oral Biol. 43:543-552, 1968.
3. Stookey, G.K. and Katz, S. Chairside procedures for using fluorides for preventing dental caries. Dent. Clin. N. Amer. 16:681-692, 1972.
4. Knutson, J.W., Armstrong, W.D. and F.M. Feldman. The effect of topically applied sodium fluoride on dental caries experience. IV Report of findings with two, four and six applications. Public Health Rep. 62:425-430, 1947.
5. Jordon, W.A., Wood, O.B., Allison, J.A. and V.D. Irwin. The effects of various numbers of topical applications of sodium fluoride. J.A.D.A. 33:1385-1391, 1946.
6. Chrietberg, J.E. Toothbrushing as a substitute for quick cleansing in the topical fluoride techniques. J.A.D.A. 42:435-438, 1951.
7. Vrbic, V., Brudevold, F. and H.G. McCann. Acquisition of fluoride by enamel from fluoride pumice pastes. Helv. Odontol. Acta. 11:21-26, 1967.
8. Millin, D.J. and M.H. Smith. Nature and composition of dental plaque. Nature. 189:664-665, 1961.
9. Cohen, M.M. A Pilot study testing the plaque-removing ability of a newly invented toothbrush. J. Periodontol. 44:183-187, 1973.
10. Tinanoff, N., Wei, S.H.Y. and F.M. Parkins. Effect of a pumice prophylaxis on fluoride uptake in tooth enamel. J.A.D.A. 88:384-389, 1974.
11. Birkeland, J.M. and G. Rolla. The affinity of fluoride for protein or protein-dextran coated hydroxyapatite. Scand. J. Dent. Res. 79:65-68, 1971.
12. Birkeland, J.M. and G. Rolla. *In vitro* affinity of fluoride to proteins, dextrans, bacteria and salivary components. Arch. Oral Biol. 17:455-463, 1972.

13. Rossinsky, R.K., Schroeder, H.E. and H.R. Muhlemann. Electron microscope study of interference of salivary cuticle with topical fluoridation. Helv. Odont. Acta. 11:163-168, 1967.
14. Joyston-Bechal, S., Duckworth, R. and M. Braden. The effect of artificially produced pellicle and plaque on the uptake of ¹⁸F by human enamel *in vitro*. Arch. Oral Biol. 21:73-78, 1976.
15. Tinanoff, N., Wei, S.H.Y. and F.M. Parkins. Effect of the acquired pellicle on fluoride uptake in tooth enamel *in vitro*. Caries Res. 9:224-230, 1975.
16. Wei, S.H.Y. Discussion. Caries Res. Vol II, Suppl. 1, 198-204, 1977.
17. Kirkegaard, E., Mikkelsen, L., Rolla, G. and O. Fejerskov. Fluoride uptake in plaque-covered enamel *in vitro*. Ann. Meet. Int. Assoc. Dent. Res. Abstr. No. L543, p. L136, 1975.
18. Bruun, C. and K. Stoltze. *In vitro* uptake of fluoride by surface enamel of cleaned and plaque-covered teeth. Scand. J. Dent. Res. 84:268-275, 1976.
19. Birkeland, J.M., Jorkend, L. and F.R. Fehr. The influence of fluoride rinses on the fluoride content of dental plaque in children. Caries Res. 5:169-179, 1971.
20. Charlton, G., Blainey, B. and R.G. Schamschula. Associations between dental plaque and fluoride in human surface enamel. Arch. Oral Biol. 19:139-143, 1974.
21. Primosch, R.E. Rubber cup prophylaxis: A re-evaluation of its use in pediatric dental patients. Dent. Hyg. 54:525-527, 1980.
22. Wei, S.H.Y. and J.S. Wefel. Topical fluorides in dental practice. J. Prev. Dent. 4:21-26, 1977.
23. Preventive Dental Services Practices, Guidelines and Recommendations. Report of the Working Group on Preventive Dental Services. Health and Welfare Canada. Sept. 1979, p. 97.
24. Jefferies, R.W. Polishing dental enamel. New Zealand Dent. J. 69:167-174, 1973.

SENIOR DENTAL HYGIENIST

Wetoka Health Unit requires a full-time *Senior Dental Hygienist*, Wetaskiwin office, position available immediately.

Responsibilities include: assisting in planning, directing, co-ordinating and evaluating the preventive dental health program; preparing and monitoring budgets; supervising staff; preparing reports; participating in Health Unit Team projects; providing dental hygiene services.

Preference will be given to applicants with two or more years of dental hygiene experience in a community health setting. Please apply in writing, stating qualifications and experience to:

Mrs. Betty Grayson
Personnel Officer
Wetoka Health Unit
5201-49 Avenue
Wetaskiwin, Alberta
T9A 0R1

Directory 1980-1981

EXECUTIVE COUNCIL:

- **PRESIDENT:** Margaret Bailey, Box 2228, Kindersley, Saskatchewan S0L 1S0. Res. (306-463-2397). Bus. (306-463-4661).
- **PRESIDENT-ELECT:** Pat Grant, 3 Linden Lane, Halifax, Nova Scotia B3R 1N1. Res. (902-477-9876).
- **FIRST VICE PRESIDENT:** Linda Berry, 1755 Bough Beeches, Mississauga, Ontario L4W 2B7. (416-624-3495).
- **SECRETARY:** Mary Anne Wailing, Box 221, Young, Saskatchewan S0K 4Y0. Res. (306-259-2024). Bus. (306-664-6372).
- **TREASURER:** Linda Wiens, 719-3rd Street East, Saskatoon, Saskatchewan S7H 1M4. Res. (306-242-6965). Bus. (306-652-0120).
- **IMMEDIATE PAST PRESIDENT:** Diane Girardin, Box 22, La Salle, Manitoba R0G 1B0. Res. (204-736-4066). Bus. (204-233-7726).

THE BOARD OF DIRECTORS:

- **BRITISH COLUMBIA:** Barbara Hewton, 2709 Marine Drive, West Vancouver, B.C. V7V 1L7 (604-926-2180); Evelyn McNee, #311 - 1385 Draycott Road, North Vancouver, B.C. V7J 3K9 (604-987-2821); Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6. (604-274-7392).
- **ALBERTA:** Laura Mowat, 11424-161 Avenue, Edmonton, Alberta T5X 2L1. (403-456-0977); Winnifred MacDonald, 72 Colleen Cres. S.W., Calgary, Alta. T2V 2R3 (403-253-6178).
- **SASKATCHEWAN:** Barbara Ferris, 5107-222 Fairmont Drive, Saskatoon, Saskatchewan S7M 4P5. (306-382-3348).
- **MANITOBA:** Gladys Syrnok, 157 Academy Road, Winnipeg, Manitoba R3M 0E2. (204-453-0562).
- **ONTARIO:** Judy Barnes, 74 Keewatin Avenue, Toronto, Ontario M4P 1Z8. (416-481-7507); Linda McCance, 5027 Wixon Street, Clairmont, Ontario

L0H 1S0. (416-649-2056); Ailsa Wood, 505-160 Balmoral Avenue, Toronto, Ontario M4V 1J7. (416-923-1669); Rosemary Arsenault, 92-B McDougall Rd., Waterloo, Ontario N2L 5C5. (519-884-4216); Jasmine Holetich, 1871 King St. East, Hamilton, Ontario. L8V 2P3 (416-549-5048); Linda Perron, 180 London St. South, Hamilton, Ont. L8K 2G9 (416-544-2409).

- **QUEBEC:** Lucie Billette-Raychat, 4641 Cumberland Street, Montreal, Quebec. H4H 2L5.
- **NEW BRUNSWICK:** Jane Cummings, 487 Westmoreland St., Fredericton, N.B. E3B 3M8 (506-455-4087).
- **NOVA SCOTIA:** Peggy Larder, 6150 Regina Terrace, Halifax, N.S. R3H 1N5 (902-329-4166).
- **PRINCE EDWARD ISLAND:** Jean MacLean, 6 Newland Crescent, Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- **NEWFOUNDLAND:** Lois Bowden, 189 LeMarchant Rd., St. John's, Newfoundland A1C 2H5 (709-579-3259).

SPECIAL COMMITTEE CHAIRMEN:

- **CONTINUING EDUCATION:** Marnie Forgay, 780 Bannatyne Ave., Winnipeg, Manitoba R3E 0W3 (204-786-3683).
- **EDUCATION:** Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4. (204-889-4890).
- **FINANCE:** Linda Wiens, 719-3rd Street East, Saskatoon, Saskatchewan S7H 1M4. (306-242-6965).
- **STUDENT MEMBERSHIP:** Cara Tax, B-652 Cavalier Drive, Winnipeg, Manitoba R2Y 1C1. (204-889-6372).

APPOINTEE OFFICERS:

- **EXECUTIVE SECRETARY:** Judy Dickey, 46 James St., Aylmer, Quebec J9H 4S6. (819-684-9102).
- **EDITOR:** Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2. (519-254-6224).

- **BOOKKEEPER:** Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7. (416-923-1669).

EXECUTIVE APPOINTMENTS:

- **SPEAKER FOR THE BOARD:** Ms. Joanne Clovis, #1-14310-80 Street, Edmonton, Alberta T5C 1L6. (403-476-6596).
- **CONVENTION CHAIRMAN:** 1981: Molly Moore, 331 Pumphill Crescent, Calgary, Alberta T2V 4M2 (403-259-6031).
- **A.C.F.D. DENTAL HYGIENE SECTION:** Carol Worobey, 516 Oakenwald Avenue, Winnipeg, Man. R3T 1M2 (204-453-3825).
- **DENTAL AUXILIARY LIAISON OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Saskatchewan S4T 1L6. (306-569-1603).
- **INTERNATIONAL LIAISON CHAIRMAN:** Sharon French, 13 Hobbs St., Nepean, Ontario K2H 6W8. (613-820-1196).
- **DATA BANK REPRESENTATIVE:** Pat Johnson, Oak Deane, R.R. No. 2, Aurora, Ontario L4G 3G8. (416-727-1433).
- **CDA COUNCIL ON HEALTH CARE:** Kate MacDonald, 3914 Gottinger St., Halifax, N.S. B3K 3G7. (902-445-8868).
- **CDA COUNCIL ON EDUCATION:** Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4. (204-889-4890).
- **CSA TECHNICAL COMMITTEE ON DENTISTRY:** Anne Bosy, 1529 Ballyclare Drive, Mississauga, Ontario L5C 1J4 (416-270-4019).
- **OFFICER OF CDHA ORGANIZATION AND PROCEDURES:** Marjorie Dimi-tri, 1606 Ayleslynn Drive, Vancouver, B.C. V7J 2T3. (604-987-7392).

STANDING COMMITTEES:

MEMBERSHIP:

- CHAIRMAN: Jo Gardner, 1125 West 54th Ave., Vancouver, B.C. V6P 1N3 (604-261-8642).
- B.C.: Casseda Parsons, 1049 West Keith Rd., North Vancouver, B.C. V7P 1Y6 (604-986-4620).
- Alta.: Linda Ewanovick, 128 Glenpatrick Drive S.W., Calgary, Alberta T3E 4L6.
- Sask.: Linda Wiens, 719-3rd St. E., Saskatoon, Sask. S7H 1M4 (306-242-6965).
- Man.: Cara Tax, B-652 Cavalier Drive, Winnipeg, Man. R2Y 1C1 (204-889-6372).
- Ont.: Debbie Van Dyke, 23-1919 Lakeshore Road W., Mississauga, Ont. L5J 4J9 (416-822-5102).
- Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Que. H1S 2Z1 (514-352-6245).
- N.B.: Jean McGinis, R.R. 219-4, Rothesay, N.B. E0G 2W0 (506-849-2240).
- N.S.: Gail Place, 201-5475 Inglis St., Halifax, N.S. B3H 1J6 (902-422-5424).
- P.E.I.: Florence Wall, Mt. Herbert, R.R. 5, Charlottetown, P.E.I. C1A 7J8 (902-569-2079).
- Nfld.: Lois Bowden, 189 LeMarchant Rd., St. John's, Nfld. A1C 2H5 (709-579-3259).

MANPOWER AND UTILIZATION:

- CHAIRMAN: Elaine Good, 26 Christine Cres., Kitchener, Ont. N2B 2M1 (519-576-2783).
- B.C.: Gail Thorp, 304-396 West 1st St., North Vancouver, B.C. V7M 1B6 (604-980-5165).
- Alta.: Ila Seabrook, 54 Woodlake Cres., Sherwood Park, Alta. (403-467-1730).
- Sask.: Irene Ekberg, 46 Hawkes Ave., Regina, Sask. S4X 1B4 (306-543-1905).
- Man.: Robyn Enns, 97 Wilkinson Cres., Portage La Prairie, Man. R1N 1A7 (204-857-6737).
- Ont.: Jenny Thomas, 2759 Selina Street, Ottawa, Ont. K2B 6P8 (613-820-0405).
- Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Que. H1S 2Z1 (514-352-6245).
- N.B.: Christine Robb, 5 Sixth Street, Moncton, N.B. E1E 3G5 (506-388-4123).
- N.S.: Linda Zambolin, 114 Regal Rd., Dartmouth, N.S. B2W 4H8 (902-434-8983).
- P.E.I.: Heather Keith, 4 Belvedere Ave., Charlottetown, P.E.I. C1A 6A8 (902-892-9361).
- Nfld.: Lois Bowden, 189 LeMarchant Rd., St. John's, Nfld. A1C 2H5 (709-579-3259).

COMMUNITY DENTAL HEALTH:

- CHAIRMAN: Dale Scanlan, 53 Ariel Court, Nepean, Ont. K2H 8J1 (613-828-7962).
- B.C.: Joanna Bravo, 1825 MacDonald St., Vancouver, B.C. V6K 3X7 (604-732-1574).
- Alta.: Joanne Clovis, 1-14310 80 St., Edmonton, Alta. T5C 1L6 (403-476-6596).
- Sask.: Karen Tadei, 101-2905 7th St. E., Saskatoon, Sask. S7H 1B1 (306-374-1865); Melanie Fjoser, 69C-3525 Avonhurst Dr., Regina, Sask. S4R 3K2 (306-545-2035).
- Man.: Kim Brown, 58 Edgemont Drive, Winnipeg, Man. R2J 3H9 (204-257-0559).
- Ont.: Fern Bowler, 2906-2 Forest Laneway, Willowdale, Ont. M2N 5X7 (416-224-5954).
- Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Que. H1S 2Z1 (514-352-6245).
- N.B.: Barbara Ash, Dept. of Health, P.O. Box 93, Saint John, N.B. E2L 3X1 (506-658-2531).
- N.S.: Sandra Burrell, 6281 Duncan St., Halifax, N.S. B3H 2Y8 (902-429-1888).
- P.E.I.: Pat Stewart, Travellers Rest, Summerside, P.E.I. (902-436-2709).
- Nfld.: Lois Bowden, 189 LeMarchant Rd., St. John's Nfld. A1C 2H5 (709-579-3259).

CONSTITUTION:

- CHAIRMAN: First Vice-President.
- B.C.: Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- Alta.: Marg Suss, 306-9925 91 Ave., Edmonton, Alta. T6E 2T7 (403-433-5332).
- Sask.: Joan Foster, 345 Laurier Dr., Swift Current, Sask. S9H 1L3 (306-773-8754).
- Man.: Ruth Konzelman, 105 Oliver Ave., Selkirk, Man. R1A 0C4 (204-482-6122).
- Ont.: Dale Scanlan, 53 Ariel Court, Nepean, Ont. K2H 8J1 (613-828-7962).
- Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Que. H1S 2Z2 (514-352-6245).
- N.B.: Anne Marie Gorham, P.O. Box 715, Fredericton, N.B. E3B 5B4 (506-454-9385).
- N.S.: Linda Zambolin, 114 Regal Rd., Dartmouth, N.S. B2W 4H8 (902-434-8983).
- P.E.I.: Debbie Richard, 19 Milbrook Dr., Charlottetown, P.E.I. C1A 7V2 (902-569-4490).
- Nfld.: Lois Bowden, 189 LeMarchant Rd., St. John's Nfld. A1C 2H5 (709-579-3259).

NOMINATIONS:

- CHAIRMAN: Pat Grant, 3 Linden Lane, Halifax, N.S. B3R 1N1 (902-477-9876).
- B.C.: Barbara Hewton, 2709 Marine Dr., West Vancouver, B.C. V7V 1L7 (604-926-2180).
- Alta.: Paulette Schulte, 10947 36A Ave., Edmonton, Alta. T6T 0E3 (403-434-0925).
- Sask.: Debbie Lang, 635 10th Ave. E., Prince Albert, Sask. S6V 6W7 (306-763-3206).
- Ont.: Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ont. M4V 1J7 (406-923-1669).
- Que. Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Que. H1S 2Z1 (514-352-6245).
- N.B.: Christine Robb, 5 Sixth St., Moncton, N.B. E1E 3G5 (506-388-4123).
- N.S.: Kim McGrail, 3 Beech St., Bedford, N.S. B0N 1B0 (902-835-8093).
- P.E.I.: Jean McLean, 6 Newland Cres., Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- Nfld.: Lois Bowden, 189 LeMarchant Rd., St. John's, Nfld. A1C 2H5 (709-579-3259).

FINANCE:

- Linda Wiens, 719-3rd St. E., Saskatoon, Sask. S7H 1M4 (306-242-6965).
- Judy Dickey, 46 James St., Aylmer, Quebec J9H 4S6 (819-684-9102).
- Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ont. M4V 1J7 (416-923-1669).

PROVINCIAL NEWSLETTER EDITORS

- B.C.: Steve Sharrock, 264 East 19th Street, North Vancouver, B.C. V7M 2G6 (604-980-5347).
- Alta.: Sherry Sanderson, 107 Cumberland Dr., N.W., Calgary, Alta. T5K 1S9 (403-289-1059).
- Sask.: Teri Gottselig, 98 Lockwood Road, Regina, Saskatchewan S4S 3G2 (306-525-5136).
- Man.: Joanne Presunka, 1041 Howard Avenue, Winnipeg, Manitoba R3T 1S1 (204-284-7143).
- Ont.: Jane Rogers, 10 Lyle Place, Kitchener, Ontario N2B 2J6 (519-576-3718).
- Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1 (514-352-6245).
- N.B.: Mary Pelletier, Site 5, Comp 18, R.R. 8, Moncton, New Brunswick E1C 8K2 (506-384-8728).
- N.S.: Gail Ward, 6299 Allan Street, Halifax, Nova Scotia B3L 1G8 (902-423-2925).
- Nfld.: Pam Vokey, P.O. Box 205, Gander, Newfoundland A1V 1W6.

Classified Advertising

Advertising copy should be directed to Graphic Media,
2646 West 3rd Avenue, Vancouver, B.C. V6K 1M3.

Classified advertising rates: \$15.00 per column inch. Remittance
must accompany ads.

HYGIENIST WELCOMED. Full or part-time employment in modern 5 Dentist Clinic. Excellent working conditions and salary. Sunny, healthy climate, ideal outdoor recreation area. Apply to Comer Dental Clinic, 440 Comer St., Williams Lake, B.C. V2G 1T7.

FULL TIME DENTAL HYGIENIST WANTED. Please send resume to: Academy Dental Facility, 1195 Fort St., Victoria, B.C. V8V 3L1 or call 388-9433.

WANTED: DENTAL HYGIENIST, 2-3 days per week for a modern preventive practice. Dr. Tom Hemsworth, 220-1070 Douglas St., Victoria, B.C. V8W 2C4 (604) 384-8028.

DENTAL HYGIENIST NEEDED. Innisfail, Alberta. Enjoy the country and yet have access to the city (Red Deer)! Contemporary well-established dental practice. Full or part-time employment. Excellent benefits. Please phone collect to 227-5312 or write Box 339, Innisfail, Alberta T0M 1A0.

COME TO THE OIL CAPITAL OF THE EAST . . . the oldest city in North America, and a beautiful rugged countryside. **DENTAL HYGIENIST REQUIRED** in St. John's, Newfoundland, fulltime, excellent salary in prevention-oriented, three dentist modern group practice. Reply to: Dental Realities, 203 LeMarchant Road, St. John's, Newfoundland, A1C 2H5. (709) 579-1213 or 722-0393.

ACCREDITED HYGIENIST for a hygienist-oriented practice in Salmon Arm, B.C. (on the beautiful Shuswap). \$95-plus-a-day depending on experience. Fulltime. Write Box 2665, Salmon Arm, B.C. V0E 2T0.

DENTAL HYGIENIST REQUIRED 3 days per week in Port Coquitlam, B.C. office. Phone Dr. A.E. Friesen (604) 941-9422.

Nanaimo, B.C., July 1, 1981, **HYGIENIST REQUIRED** for specialty practice (Pediatric Dentistry). Wide range of duties available. Desire to work with children essential, experience preferred. Reply to Dr. Wm. Croft, 170 Wallace St., Nanaimo, B.C. V9R 5B1.

INDEX TO ADVERTISERS

IFC Proctor and Gamble

2 John O. Butler Co. 4 Dentsphy International

6 Horner

Answers to Self Assessment Test

1. c 2. c 3. b 4. d 5. d 6. d 7. a 8. b 9. c 10. b

DENTAL HYGIENIST

Wetoka Health Unit requires a full-time *Dental Hygienist*, position available immediately.

Duties include involvement in: preventive pre-school and school dental health program; classroom teaching; community education programs; clinical dental hygiene for children.

Qualifications: recognized University diploma in Dental Hygiene or equivalent and preferably some experience.

Please apply in writing, stating qualifications and experience to:

Mrs. Betty Grayson
Personnel Officer
Wetoka Health Unit
5201 - 49 Avenue
Wetaskiwin, Alberta
T9A 0R1

Ministry of Health Dental Hygienists

Competition H80:2800-23

Salary \$19,248 - \$22,044

Current vacancies are in *Vernon and Maple Ridge*, please state preference. However, this competition will establish an Eligibility List to fill future vacancies throughout British Columbia. Excellent opportunities available for career-minded enthusiastic hygienists. Duties include assuming responsibility for pre-school, school and adult dental programs, delivering educational/motivational lessons, inspections/referrals and supervising staff; other related duties as required.

Qualifications - Graduation from recognized university with diploma in dental hygiene or equivalent; registration and license as Dental Hygienist in British Columbia, or eligible.

Return applications
IMMEDIATELY.



**Province of British Columbia
Public Service Commission**

Positions
are open to both
men and women.
Canadian citizens are given
preference. Obtain applications
from, and return to address below.

544 Michigan Street, Victoria, B.C., V8V 1S3

Annual Index

The Canadian Dental Hygienist/L'Hygieniste Dentaire Du Canada

Volume 14, January - December 1980

Spring, 1:1-24; Summer 2:25-48; Fall, 3:49-73; Winter, 4:74-96

SUBJECT INDEX

Book Review

Current Concepts in Dental Hygiene, Swanton, S. 1:7

Canadian Dental Hygienists' Association

CDHA 1980 Board Transactions, 4:82

President's Message, 4:83

Canadian Fund for Dental Education

Canadian Fund for Dental Education, 3:56-58

Communications

Quelques Hâbilités de Communication Appliquées à la Relation Hygiéniste Dentaire-Patient, Fréchette, S. 2:39-44

Nonverbal Behaviour in the Dental Operatory, Howe, E. 3:63-65

Dental Health Education

Tools for Nutrition and Preventive Dental Counselling for South East Asian Refugees, Scanlan, D. and Wyatt, M. 3:60-62

Self-Assessment Test, Hoover, H. 4:81

Manpower and Utilization

The Federal Dental Therapist, Davey, K. 4:87-88

Nutrition

Testing for Ascorbic Acid Status: Lingual Vitamin C Test, Burgess, N. 2:37-38

Office Emergencies

Self-Assessment Test, Eastwood, A. 3:59

Self-Assessment Test, Melancon, C. 2:36

Orthodontics

B.C.'s Orthodontic Module, Wong, J. 2:29

Periodontics

Use of Files in Conservative Periodontal Therapy, Dimitri, M. and Voris, J. 1:17-20

Profile of the Vancouver Periodontal Dental Hygiene Study Club, Brawn, S. 1:14-20

Practice

Risk of Hepatitis B, 1:8-10

A Dental Chair Modification for Children, Scanlan, D. 3:67-68

Professional Concerns

Brief Presented by the Canadian Dental Hygienists' Association to the Health Services Review Commission. 2:34-35

Resume Writing: A Sign of Our Times. (editorial) Nagle, S. 3:51

CDHA Long Term Disability Program, Berry, R. 4:89-91.

AUTHOR INDEX

A-B Berry, R. CDHA Long Term Disability Program. 4:89-91.

Brawn, S. Profile of the Vancouver Periodontal Dental Hygiene Study Club. 1:14-16

Burgess, N. Testing for Ascorbic Acid Status: Lingual Vitamin C Test. 2:37-38

C-D Davey, K. The Federal Dental Therapist. 4:87-88

Dimitri, M. and Voris, J. Use of Files in Conservative Periodontal Therapy. 1:17-20

Eastwood, A. Self-Assessment Test (CPR). 3:59

E-J Fréchette, S. Quelques Hâbilités de Communication Appliquées à la Relation Hygiéniste Dentaire-Patient. 2:39-44

Hoover, H. Self-Assessment Test (Dental Health Education). 4:81

Howe, E. Nonverbal Behaviour in the Dental Operatory. 3:63-65

K-P Melancon, C. Self-Assessment Test (medical emergencies). 2:36

Nagle, S. Resume Writing: A Sign of Our Times. (editorial) 3:51

Pittman, M. Self-Assessment Test (periodontics). 1:12-13

Q-S Scanlan, D. and Wyatt, M. Tools for Nutrition and Preventive Dental Counselling for South East Asian Refugees. 3:60-62

Scanlan, D. A Dental Chair Modification for Children. 3:67-68

Swanton, S. Current Concepts in Dental Hygiene (Book Review). 1:7

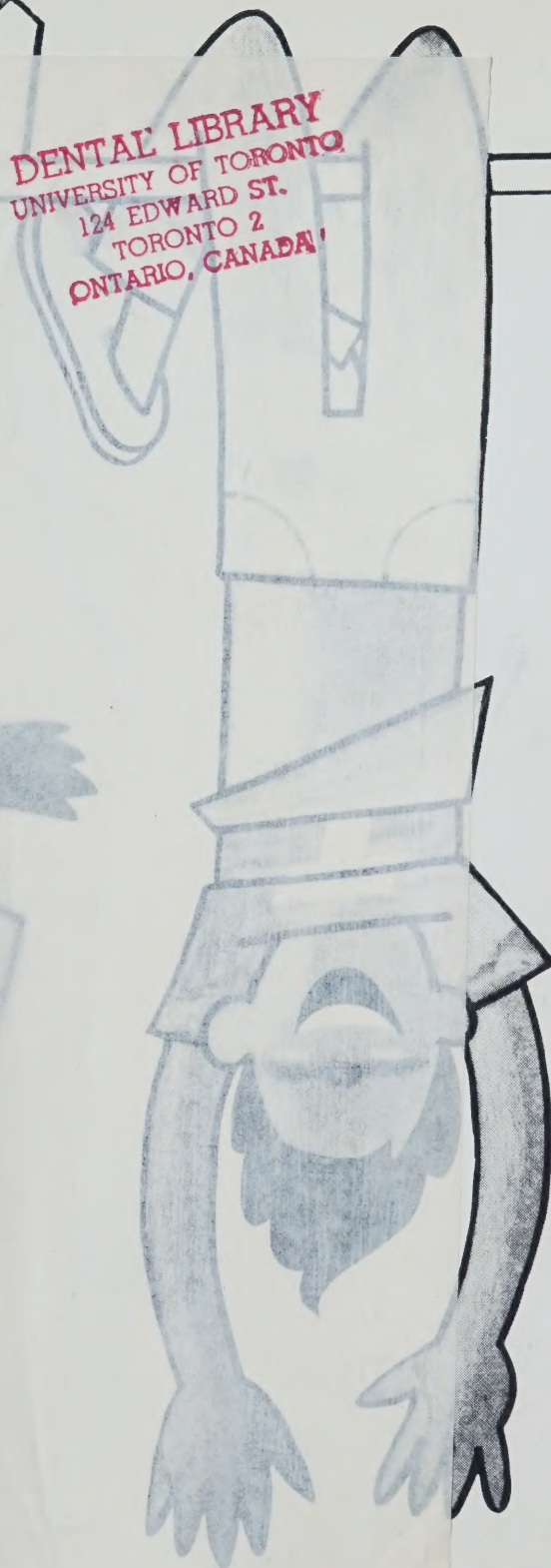
T-Z Voris, J. see Dimitri, M. 1:17-20

Wong, J. B.C.'s Orthodontic Module. 2:29

Wyatt, M. see Scanlan, D. 3:60-62



DENTAL LIBRARY
UNIVERSITY OF TORONTO
124 EDWARD ST.
TORONTO 2
ONTARIO, CANADA



Un sourire, un ami

Good Mouth Keeping

Dent

WINTER 1981 ETÉ

VOLUME 15, NO. 2

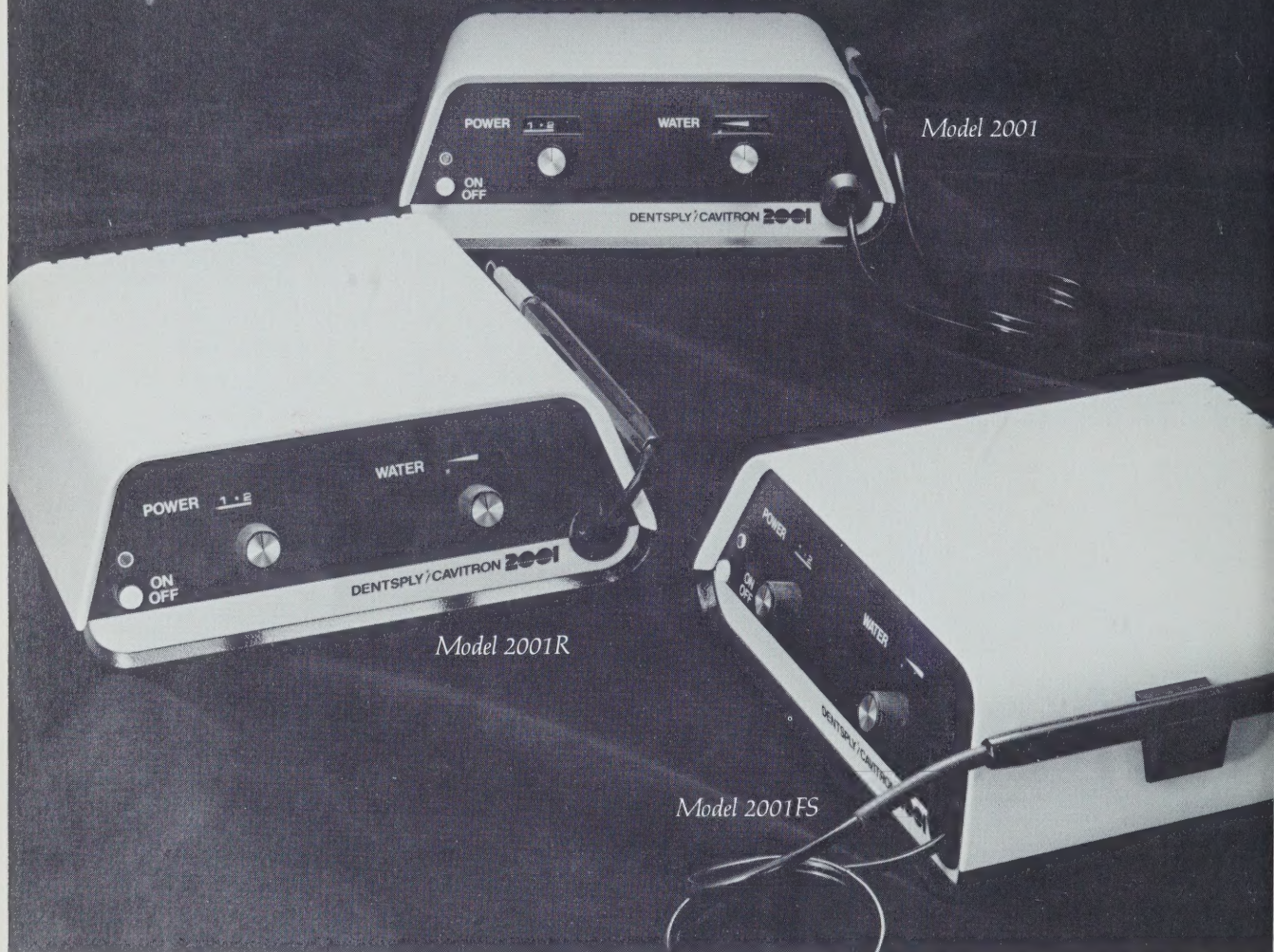
B



the canadian dental hygienist • l'hygieniste dentaire du canada



The Dentsply-Cavitron® 2001 Series.



Model 2001

Model 2001R

Model 2001FS

Three different choices in the way you operate... one superb level of performance.

All three models deliver the same gentle, efficient, reliable performance. Dentsply-Cavitron units are famous for. All three provide up to 28 watts of scaling power with automatic insert tuning, solid state circuitry and visual water flow control. Choose the operating features best suited to your style of practice:

The Model 2001FS has an "on-off" fingerswitch, which many dentists find

contributes to more continuous and efficient scaling procedures. Flick "on" for instant activation of the unit. Flick again for "off". *There is no foot control.*

The Model 2001R offers conventional foot control operation and the convenience of automatic handpiece retraction.

The Model 2001 has a plug-in handpiece and cable assembly with conventional foot control.



These Dentsply-Cavitron Ultrasonic Scaling Devices are Acceptable for use in scaling and cleaning surfaces of teeth in conjunction with other suitable prophylactic measures.

**DENTSPLY®
Equipment**

D Dentsply Canada, Ltd.
Toronto, Ontario M5T 1X5

© 1981 Dentsply International Inc.
All rights reserved.

The Canadian Dental Hygienist L'Hygieniste Dentaire du Canada

SUMMER 1981 ETÉ

VOLUME 15, NO. 2

Editor/Redacteur en chef

Stephanie Nagle, 2221 Victoria Avenue
Windsor, Ontario N8X 1R2

Advertising Manager/Gérant de la publicité

Subscriptions Manager/Gérant des abonnements
Doug Gordon, Graphic Media
2646 West 3rd Avenue,
Vancouver, B.C. V6K 1M3

Advisors/Conseillers

Joan Voris, 3589 Osler Street,
Vancouver, B.C. V6H 2W5

Marjorie Dimitri

1606 Ayleslynn Drive
North Vancouver, B.C. V7J 2T3

Louise Gosemick

8078 De Lorimier,
Montreal, Quebec H2E 2P9

Publisher/Editeur

Doug Gordon, Graphic Media
2646 West 3rd Avenue,
Vancouver, B.C. V6K 1M3

THE CANADIAN DENTAL HYGIENIST is the official journal of the Canadian Dental Hygienists' Association and is published quarterly.

All journal communications should be directed to the Editor, except subscription and advertising matters which should be addressed to the respective staff members.

Subscription rates for non-members are: \$15.00 per year in Canada and \$22.50 per year foreign.

The opinions expressed in editorials or articles are those of the authors and do not necessarily represent the views of the Association, the Publisher or the Editor.

L'HYGIENISTE DENTAIRE DU CANADA est la revue officielle de l'Association des hygiénistes dentaires du Canada et est publiée à tous trois mois.

Toutes communications ayant trait à la revue devraient être adressées au Rédacteur en chef, à part les abonnements et tout ce qui concerne la publicité, ce qui, de leur côté, devraient être adressés aux membres du personnel respectifs.

Les tarifs d'abonnements pour les non-membres sont les suivants: \$15.00 par année au Canada et \$22.50 par année en pays étranger.

Les opinions exprimées dans les éditoriaux ou dans les articles celles des auteurs et ne représentent pas nécessairement les points de vue de l'Association, de l'Editeur ou du Rédacteur.

CONTENTS/CONTENU

ARTICLES/ARTICLES

- 30 Is the Periodontal Probe One of Your Most Important Instruments? J. Voris, R.D.H., B.Sc.
- 33 National Core of Functions and Duties Legally Performed by Dental Hygienists within the Canadian Provinces and the Territories. M. Miller, R.D.H., B.A.

FEATURES/REPORTAGE

- 26 Editorial - Am I Too Sensitive?
- 40 Book Review
- 42 Self-assessment Test - Periodontal Instrumentation
- 43 Alternative: Dental Hygiene at a Dental School
- 45 Alternative: Working with the Mentally Retarded

DEPARTMENTS/SECTIONS

- 27 Newslite
- 47 Directory 1980-81
- 48 Classified Advertising
- 48 Index to Advertisers



MEMBER PUBLICATION
AMERICAN ASSOCIATION OF DENTAL EDITORS
617 6/CN ISSN 0008-3380

Am I Too Sensitive?

The term, girl, is frequently used to describe dental assistants, receptionists, officer managers, and any other personnel working in the dental office, save for the dentist, whether female or not.

Lately I've noticed myself becoming sensitive to this word, particularly when it is used to describe my position as a dental hygienist by my employer, my colleagues, my patients, and my co-workers.

Patients use this word frequently to describe "the girl at the desk", "the girl that takes x-rays", and "the girl that cleans teeth". Perhaps patients aren't familiar with the specific name for each vocation. Whose fault is this? Should we correct our patients when they use the term, girl, instead of our appropriate titles? Should we wear name tags with the word "hygienist" emblazoned on them? Should we dig out our graduation pins, hang up our diplomas, and don our caps with the lavender ribbons with a view to improving our profile? Is the word, hygienist, too difficult to expect people to remember, let alone know that you have to go to college or university to call yourself one? But how is a patient to know who and what we are, if we don't give them some hints? Until we do something tangible to enhance our identity, I have no choice but to excuse all patients who refer to me as, alas, "the girl that cleans my teeth".

That doesn't mean that I'll stop complaining about being referred to as one of the girls in the office by dentists and other dental personnel.

Now that I am past the quarter-of-a-century mark, perhaps I should be flattered by this reference, but quite frankly I interpret it as a derogatory, sexist remark and my blood pressure rises every time I hear myself referred to in this way. You can call me employee, or you can call me staff member, or you can call me co-worker, or you can call me hygienist (if you really want to make me happy), but please, please don't call me girl. After all, are male hygienists referred to as "boys that clean teeth?"

Stephanie Nagle

Stephanie Nagle, R.D.H., B.Sc.D
Editor

Newsline . . .

CDHA Members Attend More Continuing Education Programs than Non-Members

A 1978 sample survey of hygienists registered to practice in Canada showed that CDHA members attended twice as many continuing education programs as non-members during a twelve month period. Average numbers of continuing education programs attended were 2.8 for members and 1.4 for non-members.

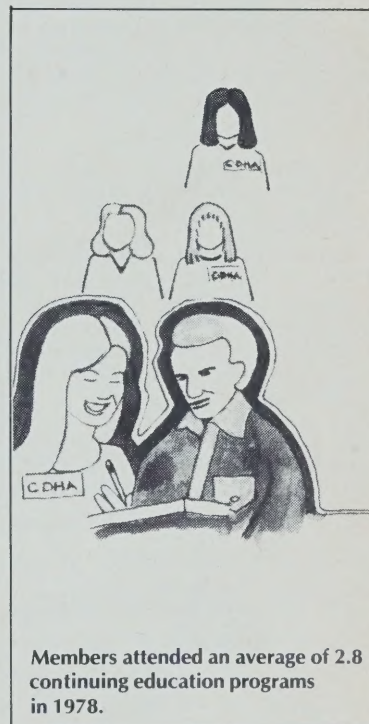
This survey was conducted by Marnie Forgay, University of Manitoba, School of Dental Hygiene, in connection with a study of attitudes of Canadian hygienists towards mandatory continuing education.

The sample consisted of every sixth name on a list of 1638 CDHA members and 1498 non-members. The overall response rate of the survey was 60.8 per cent; 78 per cent for CDHA members and 36 per cent for non-members.

Another interesting finding was that respondents living in a province where continuing education was mandatory for dental hygienists or for dentists were not more likely to be members of CDHA as compared to provinces where continuing education was voluntary. This finding may be surprising to those who assume that mandatory continuing education will increase membership in

CDHA. Non-members attended as many conventions over a five-year period as did CDHA members; however, not surprisingly, CDHA members attended more meetings of their professional organization.

This survey also outlined some differences between those who belong to the Association and those who don't; information which may prove valuable for planning future membership campaigns. Non-members had a higher average number of children and tended to live in smaller communities in comparison to CDHA members. There was no significant difference in the average age of members (27 years) and non-members (28 years). There were also no significant differences between CDHA members and non-members with regards to distance of residence from the nearest dental faculty or dental hygiene school, the number of years the respondent had worked as a dental hygienist, and the proportion of those years worked in full-time practice. In addition, membership in CDHA was not dependent upon the level of education achieved or whether the hygienist had teaching experience in a dental auxiliary program.



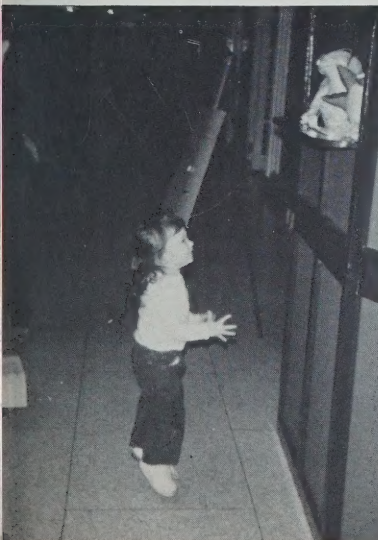
Members attended an average of 2.8 continuing education programs in 1978.

Puppet Show Conveys Dental Health Message

Big Bird and Cookie Monster of *Sesame Street* fame were the stars of a puppet show promoting dental health month at a mall in Windsor, Ontario. Essex County's Dental Hygienists' Society and Dental Society worked together to publicize this year's dental health month and to put on a puppet show which was borrowed from the Michigan Dental Hygienists' Association. Hygienists from the Windsor area worked the puppets, making their mouth the words, as a tape played in the background explaining about good snacks, proper brushing techniques, and visiting the dentist regularly. Five perform-

ances were given, and hygienist and puppeteer, Shelly Thrasher, said that the show was a hit for the five and under age group and was an excellent means of getting our dental health message across.

Any local societies wishing to publicize their dental health month projects should send a short report and a photograph to the editor of the journal, 2221 Victoria Avenue, Windsor, Ontario N8X 1R2. Tell us about your unique, attention-getting projects and inspire others to attempt new ways of promoting dental health month.



Federal Government's Working Group on the Practice of Dental Hygiene

A Working Group on the Practice of Dental Hygiene has been established under the auspices of the Health Services Directorate of the Federal Government. The working group, which will conduct its study over a period of two to three years, held its initial meeting in Ottawa, March 26 & 27, 1981, and has the following tentative terms of reference:

1. To examine current practices and available guidelines for the practice of dental hygiene.
2. To identify areas of practice of dental hygiene for which guidelines are needed, including dental public health/community dentistry, dental health promotion, private practice, institutional practice, and dental health research.
3. To conduct a literature review on the practice of dental hygiene and relevant practice standards and guidelines for other health services.

4. To construct, if feasible, a model for the practice of dental hygiene.

5. To prepare guidelines for the practice of dental hygiene, make appropriate recommendations, and submit a written report.

Nominations for members of the group were requested from the Canadian Dental Hygienists' Association, the Canadian Dental Association, the Canadian Society of Public Health Dentists, the Association of Canadian Faculties of Dentistry, and the Royal College of Dentists of Canada.

Group members include: Ms. Joanne Clovis, Dental Health Consultant, Department of Social Services and Community Health, Province of Alberta; Dr. Roger Ellis, Chairman, Department of Dental Health Care, Faculty of Dentistry, University of Alberta; Ms. Marnie

Forgay, Professor, School of Dental Hygiene, University of Manitoba; Mme. Sylvie Frechette, Hygienist dentaire, Department de sante communautaire, Centre Hospitalier Sainte-Justene, Montreal; Mrs. Pat Johnson, past President of C.D.H.A.; Mrs. Carol Kline, Community Services Co-ordinator, Program of Dental Hygiene, Faculty of Dentistry, University of British Columbia; Dr. M.H. Lewis, Executive Director, Saskatchewan Dental Health Plan; and Miss Carol Ono, Co-ordinator, Dental Auxiliary Programs, Seneca College of Applied Arts & Technology, Willowdale, Ontario. Additional members will be named to the committee in the near future. Mrs. Sharon French, Adviser, Dental Health Standards, Health Services Directorate, Ottawa, serves as co-ordinator of the working group. The group will name its chairman when its membership is complete.

Quebec Still Promotes Fluoridation

Rumours that Quebec bans fluoridation have proved to be false. In a letter to the Canadian Dental Association, dated February 11, 1981, an official of the Quebec Ministry of Social Affairs stated that the law concerning fluoridation has not been rescinded; however, the ministry does not apply sanctions to recalcitrant municipalities that had fluoridated voluntarily.

The Quebec Assembly had adopted mandatory fluoridation in June 1975. However, strong opposition developed including that of Mayor Drapeau of Montreal. An advisory committee presented a report to the Minister of the Environment which condemned fluoridation and got extensive coverage from the media.

In spite of this, the Ministry of Social Affairs still believes in fluoridation and considers that it should be the basis for all dental public health programs. It continues the offer to pay the total cost of purchase and installation of fluoridation systems.

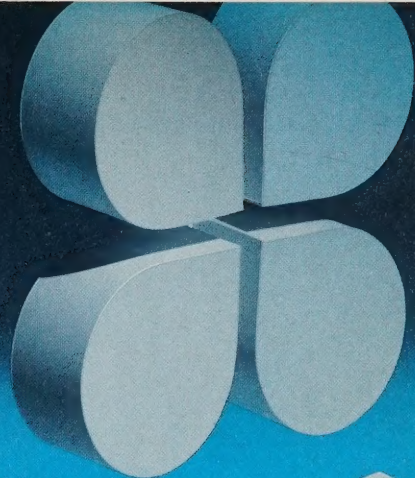
WAS THIS JOURNAL CORRECTLY ADDRESSED?

Every copy of the journal returned to us costs the Canadian Dental Hygienists' Association approximately fifty cents. If you are moving permanently, please let us know two months before changing your address. If the address label on this publication is not correct, please clip it, then paste it in the blank provided and mail this entire coupon to us, including your new address! Thank you.

Name _____
Address _____
City _____
Province _____
Postal Code _____

Mail to: Jo Gardner, CDHA Membership Chairman
1125 West 54th Avenue
Vancouver, B.C. V6P 1N3

**your
single
source...**



Butler

Toothbrushes—13 styles of G•U•M® and Dr. Bass brushes.
Floss—Shred-resistant Unwaxed, Fine Unwaxed, Bit O' Wax® and Tape.
Disclosants—Red Cote® Tablets or Liquid.

Other Preventive Aids: EEZ-THRU® Floss Threaders □ Floss Mate® Floss Handle □ Proxabrush® Handles and 4 refill sizes □ Interdental Brush □ Stimulator Handle □ Mirolite® and Plakfinder® Mirrors □ Fluorides, Trays, and Propyl Paste □ PROTECT Toothpaste for Sensitive Teeth



For more than half a century you've been able to look to Butler as your source for quality preventive "home-care" dental aids whether you dispense or recommend. Available at better drug stores everywhere.

Butler

Is the Periodontal Probe One of Your Most Important Instruments?

Joan S. Voris, R.D.H., B.Sc.

Today periodontal disease is still a world wide problem and the major cause of tooth loss in the over thirty-five age group. It is insidious and progressive in nature, and is often only diagnosed after extensive localized or generalized destruction has occurred. Although considerable responsibility for preventing and controlling periodontal disease lies with individual patients, the dental hygienist and dentist must assume major responsibility for its early recognition during routine clinical examinations.

The value of the periodontal probe as a diagnostic tool in the prevention, recognition and control of periodontal disease is well documented.¹⁻¹⁰ This article will review the probe's utilization, design, instrumentation, and care, especially as they relate to dental hygiene practice.

UTILIZATION

The probe will provide a variety of measurements and relationships which, when documented, will provide valuable diagnostic information about the relative health and status of the entire periodontium. Specifically, the periodontal probe will provide information relating to the presence and depth of periodontal pockets, the approximate configuration of bony defects, the relationship of pocket depth to the mucogingival junction, the width of gingiva, the extent of gingival recession, and the thickness of soft tissue present over an edentulous ridge, tuberosity region, or retromolar area.¹

In dental hygiene practice the probe should be routinely used to examine the gingiva for bleeding and to determine the depth, shape and tissue characteristics of the sulcus. The probe is also useful for detecting anatomical configurations of roots, furcation involvements, and the presence of de-

posits and roughness, which may be used as a guide for the selection and adaptation of instruments. Lastly, it is an important instrument in evaluating tissue response to instrumentation and home care recommendations.²

DESIGN

There are a variety of probes currently available with the choice of a particular design being based primarily on individual preference. Probes vary most in cross-sectional design and millimeter markings.^{2,7,10}

For effective adaptation and utilization, the diameter of the working end of the probe is important. It should be narrow enough to be easily inserted into the sulcus without causing undue distension of the soft tissue wall. In addition, the tip should be rounded or blunt enough so as not to puncture or traumatize the soft tissues of the sulcus. Rectangular (flat) probes require more attention to adaption and are useful primarily for facial and lingual surfaces.² Examples of several different probe designs are illustrated in Figure 1.

Periodontal probes are calibrated in millimeters to facilitate reading and documentation. Many hygienists prefer the newly color-coded ones. (Figure 2). A relatively new color-coded probe, designed originally by the World Health Organization for use internationally, is now available commercially in Canada. (Figure 3).

Periodontal probes of the same design may vary considerably from one manufacturer to another. It is important to evaluate the different ones available and to select one featuring the desirable characteristics. Some of the manufacturers of periodontal probes are listed in Table 1.

For accuracy in documentation it is desirable to select and use one type of probe and if possible have all operators

working in the same office using the same one. It is also important to check all probes for the position and accuracy of the first marking.

INSTRUMENTATION

Regardless of the type of probe used, effective utilization depends on the skill and clinical judgment of the operator. In using the probe for either documentation or as a guide to root instrumentation the basic principles of instrumentation are practiced with emphasis on a firm grasp but light pressure. The probe is guided into the sulcus until it meets the resistance of the epithelial attachment. At least 1 mm of the side of the tip is kept on the tooth surface as the probe is gently moved around the entire tooth. The instrument is kept as parallel to the long axis of the tooth as possible, taking into consideration variation in tooth morphology and positioning.

Two of the most common errors in utilizing the probe are not inserting it to the depth of the sulcus, and not covering the entire tooth surface. (Figure 4). While it is essential to cover the entire tooth surface during the clinical examination, generally only six probe readings are recorded for documentation purposes.

Another frequent error is failing to position the probe accurately in the proximal area which is one of the most frequent sites of early periodontal breakdown. Adaptation in this area requires a slightly angled approach (Figure 4).

CARE

The probe should be thoroughly scrubbed after each use and sterilized along with other instruments. Most color coded probes should not be placed in the ultrasonic cleaning device and require more careful handling to protect the colored markings.

A MINIMUM STANDARD OF DENTAL CARE

Prevention, recognition, and treatment of periodontal disease is dependent upon the routine and effective use of the periodontal probe. It should be one of your most important instruments and should be included on every tray set-up.

As malpractice suits increase against dentists and hygienists for failure to recognize periodontal disease, a routine periodontal examination and the use of the periodontal probe on every adult patient could become a minimum standard of dental care. Failure to do so would constitute negligence. The motivation for this, however, should not be the threat of legal action, but rather it should be a moral and ethical commitment to provide the most complete treatment for your patients.

REFERENCES

1. Tibbetts, L.S. "Use of Diagnostic Probes for Detection of Periodontal Disease." *Journal of the American Dental Association*. 78:449,1969.
2. Wilkins, E. *Clinical Practice of the Dental Hygienist*. Philadelphia: Lea & Febiger, 1976.
3. Schluger, S., Yuodelis, R., and Page, R. *Periodontal Disease*. Philadelphia: Lea & Febiger, 1977.
4. Carranza, F.A. *Glickman's Clinical Periodontology*. Philadelphia: Saunders, 1979.
5. Grand, D., Stern, I., and Everitt, F. *Periodontics*. St. Louis: Mosby, 1979.
6. Ramford, S.P. and Ash, M.M. *Periodontology and Periodontics*. Philadelphia: Saunders, 1979.
7. Pattison, G. and Pattison, A. *Periodontal Instrumentation*. Reston: Reston Publishing Co., 1979.
8. Listgarten, M.A. "Periodontal Probing: What Does It Mean?" *Journal of Clinical Periodontology*. 7: 165, 1980.
9. Goldman, H., and Cohen, D.W. *Periodontal Therapy*. Philadelphia: Mosby, 1980.
10. Woodall, I., et. al. *Comprehensive Dental Hygiene Care*. Philadelphia: Mosby, 1980.

TABLE I
Some of the Manufacturers of Periodontal Probes

American Dental Manufacturing Company Box 4546 Missoula, Montana, U.S.A. 59801
G. Hartzell & Son P.O. Box 5955 Concord, California, U.S.A. 94520
Hu-Friedy Manufacturing Company 3118 N. Rockwell Street, Chicago, Illinois, U.S.A. 60618
Marquis Dental Manufacturing Company 15370 H Smith Road Aurora, Colorado, U.S.A. 80011

Star Dental Manufacturing Company
Ford Bridge Road,
Conshohocker, Pennsylvania, U.S.A. 19428

S.S. White Company
211 South 12th Street
Philadelphia, Pennsylvania, U.S.A. 19105

Western Metallurgical Limited
14445 116th Avenue
Edmonton, Alberta, Canada T5M 3E8

The author is an Assistant Professor in the Department of Preventive and Community Dentistry and Director of the Program of Dental Hygiene at The University of British Columbia. In addition she is employed in office practice on a part-time basis.

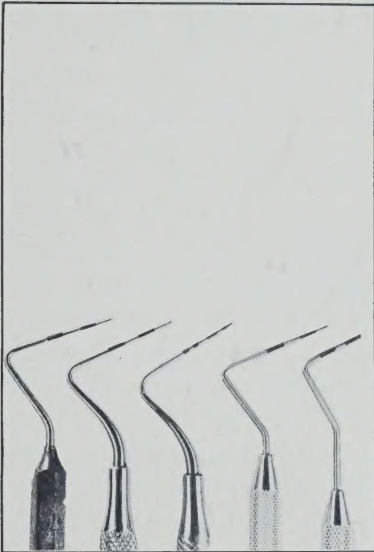


FIGURE 2: Examples of colour-coded probes by different manufacturers (left to right): Marquis #5, American #4, American #1, Hu-Friedy #12, and Hu-Friedy #8.

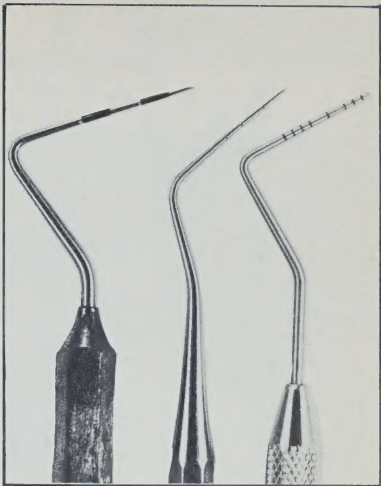


FIGURE 1: Examples of probes (left to right): Marquis Colour-coded, Michigan "O", and Williams.

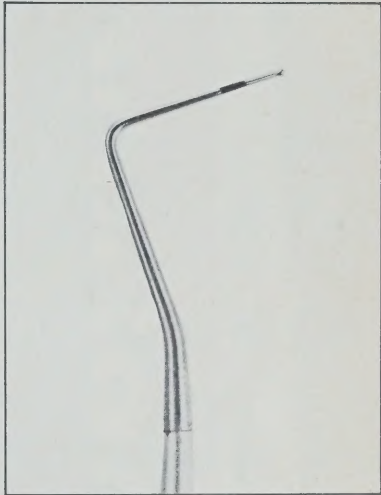


FIGURE 3: WHO probe.

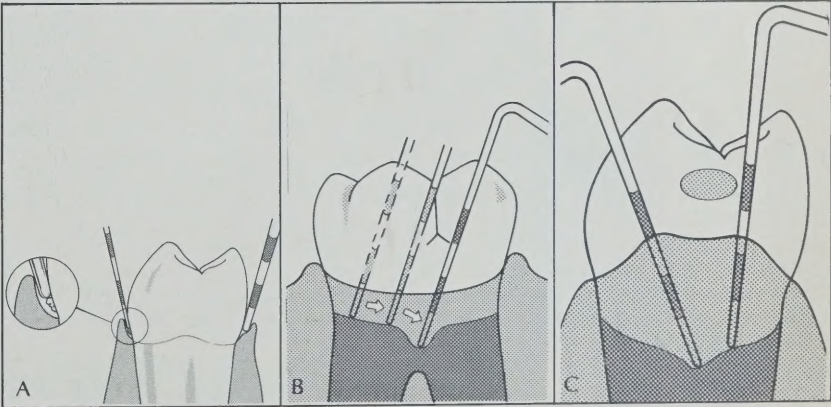


FIGURE 4: A. Insertion to depth of sulcus inadequate due to presence of calculus and size of probe tip. B. Probe adapted and moved so side of tip contacts tooth surface and tip traces epithelial attachment. C. Probe on left adapted accurately for proximal surface assessment; probe on right inadequately adapted.

COLGATE INTRODUCES A BREAKTHROUGH IN TOOTHPASTE FORMULATION.

TWO FLUORIDES IN ONE TOOTHPASTE.

New Colgate is the first and only toothpaste in Canada to combine the two fluoride compounds now most widely used to provide superior caries reduction.

In New Colgate, (0.76%) sodium monofluorophosphate and (0.1%) sodium fluoride have been incorporated in a hydrated alumina base. And a 3-year clinical study conducted in England,* confirms that this combination provides superior protection when compared to a single fluoride formula with sodium monofluorophosphate (0.76%).

The clinical results lend support to the recommendation made by a team of experts reporting on the U.S. National Caries Program,** that different combinations of fluorides, bases, etc. should be studied "to determine the combination that is most effective in preventing caries."

In summary, the clinical trial provides evidence that Colgate's combination of fluorides gives superior caries protection. We urge you to recommend the only product that combines two fluorides in one toothpaste.

New Colgate.

*Published by the British Dental Journal, October, 1980.

**Evaluation of the National Institute of Dental Research National Caries Program, Volume 1, November, 1979, Page 56.

CLINICAL ADVANCE!
Colgate *
ACTIVE
MFP Fluoride
SYSTEM

"Colgate Toothpaste contains sodium monofluorophosphate and sodium fluoride which are, in our opinion, the most effective and most significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

National Core of Functions and Duties Legally Performed by Dental Hygienists within the Canadian Provinces and the Territories

DENTAL HYGIENIST Function/Duty	BRITISH COLUMBIA	ALBERTA	SASKATCHEWAN	MANITOBA	ONTARIO	QUEBEC	NEW BRUNSWICK	NOVA SCOTIA	PRINCE EDWARD ISLAND	NEW-FOUND-LAND	YUKON N.W.T.
Cleaning and polishing natural and restored surface of the crown of the teeth beginning at epithelial attachment (includes stain and calculus deposits).	×	×	×	×	×		×	×	×	×	
Root planing and soft tissue curettage.	Root planing only	Root planing only	×	×	×			Root planing only			
Perform surgical curettage and minor perio surgery.			Following College approved course								
Counselling, instruction and demonstration for maintenance or improvement of dental health.	×	×	×	×	×		×	×	×	×	
Planning, conducting and evaluating patient and community dental health education.	×		×	×	×		×	×	×	×	
Conducting screenings and compiling statistics for epidemiological purposes.	×	×	×	×	×			×	×	×	
Administering First Aid.	×	×	×	×				×	×	×	
Exposing and processing radiographs.	×	×	×	×	×		×	×	×	×	
Pulp vitality testing.	×	×	×	×						×	
Topical application of anti-cariogenic agents.	×	×	×	×	×		×	×	×	×	
Examination and recording of conditions of the oral cavity.	×	×	×	×	×		×	×	×	×	

DENTAL HYGIENIST Function/Duty	BRITISH COLUMBIA	ALBERTA	SASKAT- CHEWAN	MANITOBA	ONTARIO	QUEBEC	NEW BRUNS- WICK	NOVA SCOTIA	PRINCE EDWARD ISLAND	NEW- FOUND- LAND	YUKON N.W.T.
Examination of head and neck as it pertains to dentistry.	×	×	×	×	×			×		×	
Apply pit and fissure sealants.	×		×	×	×		×	×	×	×	
Taking impressions for study models and prepare study models.	×	×	×	×	×		×	×	×	×	
Preliminary and final impressions from which denture can be fabricated.			Following College approved course	×						Preliminary impressions only	
Application and removal of periodontal dressings.	×		×	×	×			×			
Suture removal.	×	×	×	×	×			×	×		
Desensitize teeth.	×	×	×	×	With fluoride only			×	×	×	
Overhang removal (recontour- ing of existing restorations).	×	×	×	×	With hand instruments only			×	×		
Topical application of medicaments.	×	×	×	×				×	×	Following approved training	
Application and removal of rubber dam.	×	×	×	×	×			×	×	Following approved training	
Matrix and wedge application and removal.	×	×	Following College approved course	Completion of MDA approved Restorative program	Approved in writing RCDS			×	×	Following approved training	
Placement of temporary restorations.	×		Following College approved course	×	Approved in writing by RCDS			×	×	Following approved training	
Placement, carving and finishing of plastic restorations.			Following College approved course	Completion of MDA approved Restorative Program	Approved in writing by RCDS		×	×	×	Following approved training	

DENTAL HYGIENIST Function/Duty	BRITISH COLUMBIA	ALBERTA	SASKAT- CHEWAN	MANITOBA	ONTARIO	QUEBEC	NEW BRUNS- WICK	NOVA SCOTIA	PRINCE EDWARD ISLAND	NEW- FOUND- LAND	YUKON N.W.T.
Fitting of space maintainers.	Upon completion of Orthodontic module		Following College approved course	Completion of MDA approved Orthodontic module				Following appropriate instruction in dental office			
Application of wax or other material to offending components or removal of offending components.	Upon completion of Orthodontic module		Following College approved course		×					×	
Provision of instruction in placement and care of removable orthodontic appliance.	×		Following College approved course	Completion of MDA approved Orthodontic module				×	×		
Prepare and record preliminary occlusal records.	×		Following College approved course		×			×		×	
Classify occlusal and identify deviant swallowing patterns.	×	×	Following College approved course		×			×			
Administration of local anaesthesia.	Upon completion of approved training		Following College approved course								
Cement temporary crowns previously filled by dentist.	×		Following College approved course		Approved in writing by RCDS			×			
Fabricate, cement and remove temporary crowns.			Following College approved course					Following appropriate instruction in dental office			
Placement of cavity liners where pulp has not been exposed.			Following College approved course	×	Approved in writing by RCDS		×	×	×	×	
			Following								

Obtain endodontic cultures.	X		Following College approved course						X			
Fabricate mouthguards.			Following College approved course	X	X				X			
Emergency application of temporary sedative dressings to hard and soft tissues.	X		Following College approved course	X	Approved in writing by RCDS					X		
Gingival Retraction for impression taking.			Following College approved course	X	Approved in writing by RCDS				X		X	
Other.	As may be determined by the CDSBC		Business and general office duties as delegated by the dentist	As may be determined by the Manitoba Dental Association				Performing extra-oral duties designated by the dentist			Duties of dental assistant. Any specific duties as determined by the dentist	

This grid should provide Canadian Dental Hygienists with the knowledge of what procedures and functions are legally recognized and performed in each province, and therefore assist in portability and in establishing of modules and continuing education programs with approval of the licensing bodies. Keep this for reference and as changes occur they will be published in THE CANADIAN DENTAL HYGIENIST.

Prepared for the C.D.H.A. by Margaret E. Miller, R.D.H., B.A., Education Chairperson C.D.H.A. April 1981. Any changes in duties or functions should be directed to her.

LICENSING AUTHORITIES

ALBERTA

Alberta Dental Association
Dr. B.P. Martinello, Exec. Dir.
101-8230 - 105th Street
Edmonton, Alberta T6E 5H9
403-432-1012

BRITISH COLUMBIA

College of Dental Surgeons of British Columbia
Dr. G.R. Thordarson, Registrar
1125 West 8th Avenue
Vancouver, B.C. V6H 3N4
604-736-3621

MANITOBA

Manitoba Dental Association
Mr. R.H. McIntyre, Sec. Treas.
300-296 Kennedy Street
Winnipeg, Manitoba R3B 2M6
204-942-5211

NEW BRUNSWICK

New Brunswick Dental Society
Dr. J.G. Thompson, Exec. Dir.
79 Neck Road, Quispamsis
Rothesay, New Brunswick E0G 2W0
506-847-4243

NEWFOUNDLAND

Newfoundland Dental Association
Dr. T. Gushue, Exec. Sec.
205 Le Marchant Road
St. John's, Newfoundland A1C 2H5
709-579-2362

NORTHWEST TERRITORIES/YUKON

For information:
Ms. Helen Roberts
403-873-7403

NOVA SCOTIA

Nova Scotia Dental Association
Mr. D.V. Pamenter, Exec. Dir.
P.O. Box 604
Halifax, Nova Scotia B3J 2R7
902-454-5449

ONTARIO

Royal College of Dental Surgeons of Ontario
Dr. K.F. Powell, Registrar
230 St. George Street
Toronto, Ontario M5R 2N5
416-961-6555

PRINCE EDWARD ISLAND

Dental Association of P.E.I.
Dr. R.D. Wenn, Sec. Treas.
P.O. Box 280
Cornwall, P.E.I. C0A 1H0
902-675-2128

QUEBEC

Quebec Corporation
Mrs. Goudreault, General Secretary
5757 Descelles Avenue, Suite 233
Montreal, P.Q. H3S 2C3
514-733-4098

SASKATCHEWAN

College of Dental Surgeons of Saskatchewan
Dr. G.H. Peacock, Sec. Treas.
105 - 21st Street East
Saskatoon, Saskatchewan S7K 0B3
306-224-5092

ANNOUNCING A NEW BOOK by Ann Wells Hunnicutt, R.D.H.

BE YOUR OWN BOSS

3 new chapters!

NEW REVISED 2ND EDITION! A NEW DIRECTION IN DENTAL HYGIENE

Recent Legislation has opened up a whole new world of options for the dental hygienist. Now this book explains how you can become an independent contractor dental hygienist and *be your own boss!*

Topics Covered Include:

- What Does It Mean To Be Independent?
- How To Start
- The Financial Commitment
- How to get the money to start
- How much money will be needed?
- The Law and The Dental Hygienist
- The Dental Hygienist as a Businessperson
- Is a business Manager necessary?
- Accounting Systems
- The Dental Hygienist as An Employer
- The Dental Hygienist and the IRS
- Tax Benefits\Fringe Benefits\Tax Structures
- Renting or Leasing Office Space
- Shopping For Dental Equipment and Office Furniture
- The Business Telephone
- The Daily Flow of Patients
- The Contract

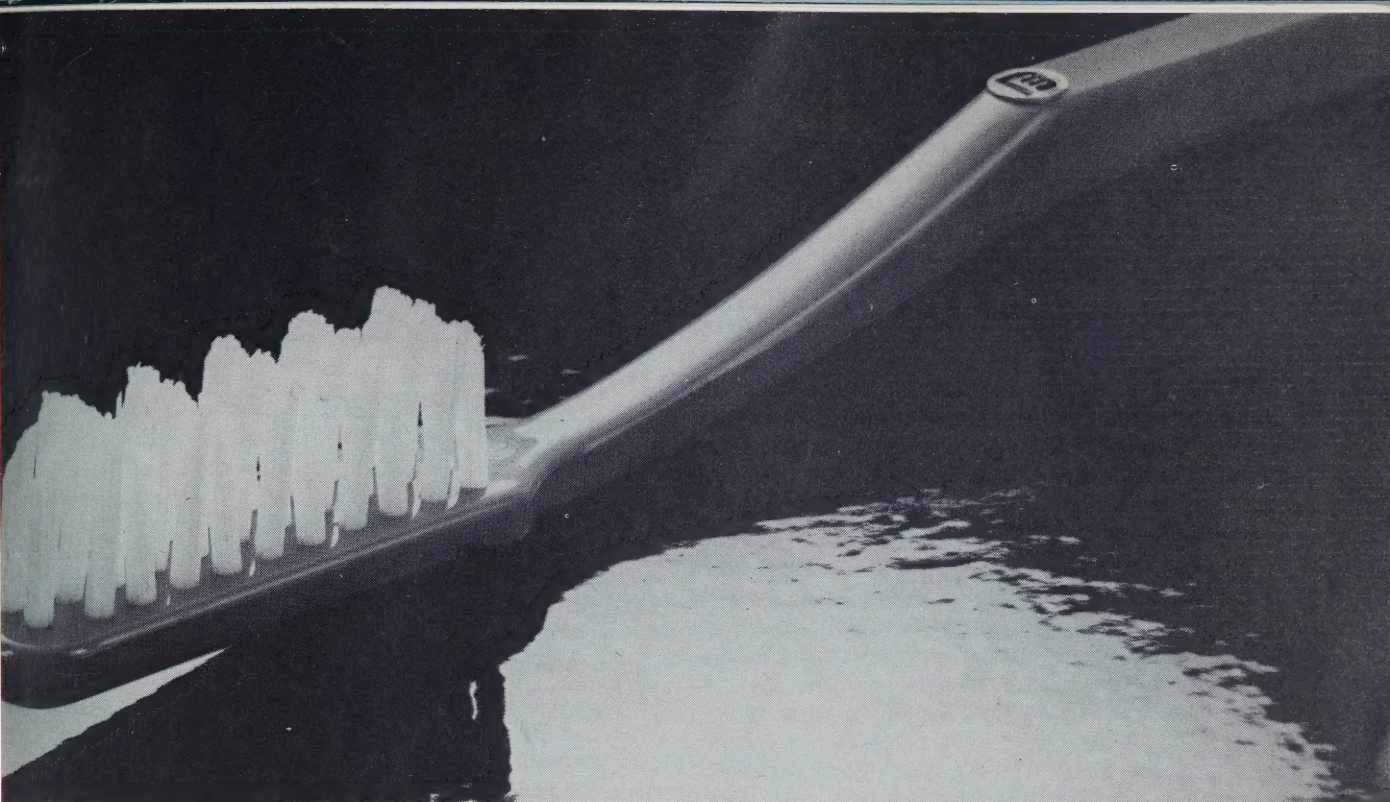
Order your information-packed copy today. Send \$10.00 (postage and handling included) to: Ann Wells Hunnicutt, 1515 State Street, Suite 12, Santa Barbara, CA 93101.

Please send me _____ copy(ies) of
Be Your Own Boss at \$10.00 each. Postage
and handling are included in the price.
(\$.95) California residents please add 6% tax
total payment enclosed _____

Name _____

Address _____

City _____ State _____ Zip _____



Four recent studies* into relative toothbrush efficacy have proven the same thing. Jordan brushes best.

The Jordan V Soft. The Jordan V-tufted soft-bristle toothbrush was found to be the most efficient of all brushes tested in terms of plaque removal, particularly in interproximal margins.

V-Tufted Brushes. V-tufted toothbrushes were found to

remove plaque more effectively than straight-cut multitufted toothbrush designs.

Soft Bristles. Soft-bristle brushes remove plaque better than firmer textures, particularly when vertical brushing motions are used.

Time Spent Brushing. Not surprisingly, plaque removal was found to increase with time spent brushing.

Brushing Pressure. Also confirmed was that plaque removal is significantly enhanced with increased pressure of brushing.

Jordan

Designed to reach
where other brushes can't.

*Yankell, S.L., U Pa Sch Dent Med, Phila, Penn IADR Journal of Dental Research, Jan 79, Vol. 58, P. 239, Abstr 585
Nygaard-Østby, P., et al, Jordan as Oslo, Norway; U Pa Sch Dent Med, Phila, Penn.
Bergenholtz, A., Dept Periodont, U Umea, Umea, Sweden.
Yankell, S.L. et al, U Pa Sch Dent Med, Phila, Penn.

FOR FURTHER INFORMATION, OR TO ORDER PROFESSIONAL SUPPLIES, WRITE TO: "THE JORDAN TOOTHBRUSH", C/O FRANK W. HORNER INC., P.O. BOX 959, STATION "A", MONTREAL, QUEBEC H3C 2W6, OR TELEPHONE (COLLECT) 514-731-3931.

HORNER
Montreal Canada

Book Review

Comprehensive Dental Hygiene Care

In this text by Irene Woodall, Bonnie Dafoe, Nancy Stutsman Young, Leslie Weed-Fonner, and Samuel Yankell, the hygienist comes across as an invaluable member of the dental health team. All the responsibilities of the hygienist are well documented in a lucid and descriptive manner.

The overall theme is to involve the patient in planning their own treatment and to treat the patient as a partner in care. Areas which are covered extensively include: comprehensive periodontal assessment; self-assessment of oral health by the patient (including an oral cancer self-exam); planning for care; intra-oral photography; case documentations; integrating dental hygiene principles in dental practice; and emergency procedures.

The book is divided into 4 parts:

1) assessment

- 2) planning
- 3) implementation
- 4) evaluation

This encourages the hygienist to provide individual patient care which will increase the challenge, stimulation, and gratification of practising dental hygiene. Each chapter lists suggested objectives which would provide excellent discussion topics for a classroom or study club. Activities and review questions, (which are answered at the end of the text), appear at the conclusion of each chapter.

On completion of this book, there is confirmation that care is not done to the patient or on the patient, but for and with the patient. This text is an excellent addition to the existing literature written for the profession of dental hygiene.

Harriet McCabe, R.D.H.
George Brown College, Toronto

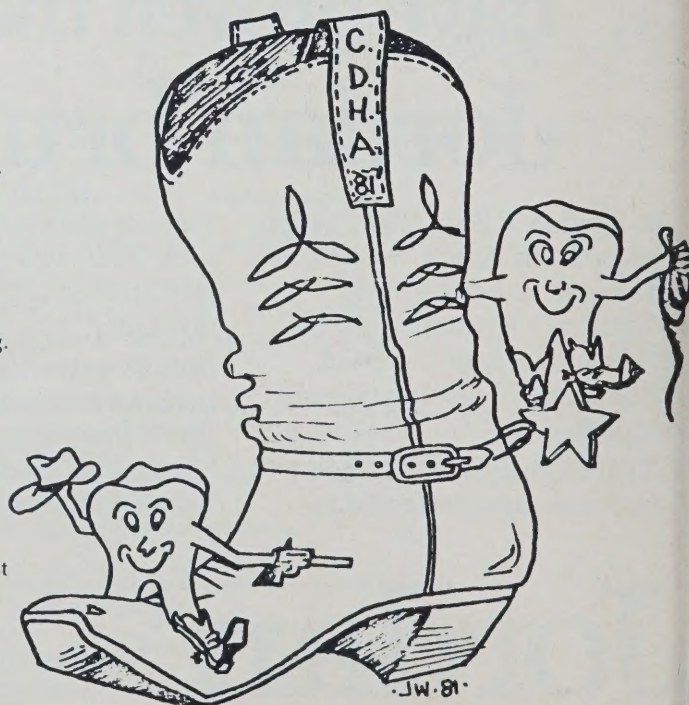
CONVENTION ACCOMMODATION

The Convention Committee has been working hard to ensure that all hygienists attending the 18th Annual CDHA Convention get the most for their money. The Sandman Inn, headquarters for dental hygiene, is offering the most reasonable rates of any of the hotels which auxiliaries and dentists will be staying at.

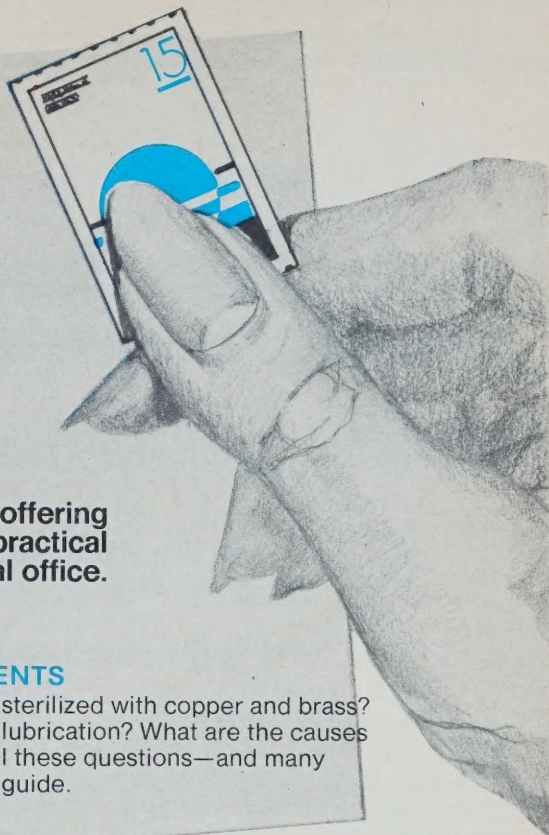
Rates quoted in the Convention Registration forms are wrong. Please note the following changes:

THE SANDMAN INN	Single:	\$43.00
	Double:	\$49.00
	Twin:	\$52.00
	Triple:	\$56.00
	Quad.:	\$57.00

Rooms have been reserved on a first-come basis. Since August is a peak tourist time, please make your reservations early (forms included with spring journal).



YOURS FOR THE PRICE OF A STAMP!



**Hu-Friedy is offering
three informative and practical
guides for your dental office.**

CARE OF DENTAL INSTRUMENTS

Can stainless steel instruments be sterilized with copper and brass? What instruments require periodic lubrication? What are the causes of pitting, spotting and staining? All these questions—and many more—are answered in this handy guide.

INSTRUCTIONS FOR SHARPENING INSTRUMENTS

Can you recognize the "look" of sharpness? One quick way is under bright light. When an edge is dull, its surface reflects a thin bright line. When sharp, the line disappears. This simple test for sharpness, plus how-to-sharpen steps are fully covered in this handy guide. Also, you'll become acquainted with the various sharpening stones and their uses.

INSTRUMENTS FOR THE DENTAL HYGIENIST

This mini-catalog illustrates all the instruments most-used by the dental hygienist, in *actual size*. Eliminates guesswork and incorrect ordering, helps you determine the instrument just right for you. Keep it handy as a reference and ordering guide.

**SEND COUPON TODAY
FOR YOUR FREE HU-FRIEDY
DENTAL HYGIENIST GUIDES!**



Hu-Friedy

3232 N. ROCKWELL STREET
CHICAGO, ILLINOIS 60618

Yes! I want the following FREE booklets:

- ☐ Care of Dental Instruments
- ☐ Instructions for Sharpening Instruments
- ☐ Instruments for the Dental Hygienist

Name _____

Address _____

City _____ State _____ Zip _____

Self-assessment test

The 1981 series of Self-Assessment Tests are provided by dental hygiene educators at Dalhousie University, Halifax, Nova Scotia. The second test reviews **Periodontal Instrumentation**. When you have completed the test, turn to page 48 for the correct answers.

1. The most effective and versatile instrument for root planing is the:
(a) sickle
(b) **curet**
(c) file
(d) ultrasonic scaling devise
2. The primary objective of scaling and root planing is to:
(a) remove all the cementum
(b) cause shrinkage of gingival tissues
(c) create glasslike root surfaces
(d) **restore gingival tissues to health**
3. Working angulation with a curet is:
(a) more than 15° but less than 45°
(b) less than 90° but more than 45°
(c) more than 90°
(d) depending upon surface being instrumented
4. While activating the curet the exploratory stroke is used:
(a) only after the removal of calculus
(b) very seldom
(c) intermittently with the working stroke
(d) exclusively
5. A thoroughly root-planed surface should be:
(a) soft and smooth
(b) smooth and glasslike
(c) hard and grainy
(d) hard and concave
6. How long after scaling and root planing should you wait to evaluate soft tissue response?
(a) five days
(b) one week
(c) two weeks
(d) three weeks
(e) one month
7. The most objective and reliable indication of successful scaling and root planing is:
(a) reduction of pocket depth
(b) root smoothness
(c) absence of plaque
(d) lack of bleeding upon probing
8. Which of the following result from the use of dull instruments for scaling and root planing?
(a) reduced tactile sensitivity
(b) calculus may be burnished into the root surface
(c) inadvertent slipping and possible trauma to patient
(d) potential for "heavy-handedness"
(e) all of the above
9. Correct principles of sharpening include:
(a) maintaining a light, loose grasp of both stone and instrument
(b) using heavy pressure with the stone
(c) establishing the proper angulation between the stone and the surface of the instrument
(d) sharpening only when the instrument is very dull
10. Which design feature(s) of the sickle limit(s) its use in subgingival areas?
(a) a sharp pointed tip
(b) straight cutting edges
(c) sharp back of blade
(d) bulky blade
(e) c and d
(f) all of the above

REFERENCE: *Periodontal Instrumentation - A Clinical Manual* by Gordon Pattison and Anna Matsuishi Pattison, 1979 by Reston Publishing Co., Inc., Reston, Virginia, 22090.

Kate MacDonald
Marilyn Kinnear
School of Dental Hygiene
Dalhousie University

Alternative: Dental Hygiene at a Dental School

Dianne Bryant, R.D.H.
Written for Barbara Long, R.D.H.



Barb demonstrates scaling techniques to a dental student at the University of Saskatchewan.

One of the most enthusiastic hygienists I know is Barbara Long from Saskatoon; she positively exudes enthusiasm for her profession. By making the most of her potential as a dental auxiliary, she has created a rich and varied career for herself. Always willing to try her hand at something new, Barb has worked as a chairside assistant, dental nurse, and dental hygienist. She trained in one of the first classes for Saskatchewan Dental Nurses at Wascana Institute in Regina and graduated from the province's first class of dental hygiene in 1980. Any one of us who has worked with Barb is inspired by her pioneering spirit. She believes in creating a need for her services — then filling it.

Barb is employed by the Faculty of Dentistry, University of Saskatchewan, Saskatoon, where her clinical responsibilities include: providing clinical instruction for third and fourth year dental students in oral health counselling and scaling procedures; administering local anesthetic and checking the application of rubber dam for the third year students until they have mastered these techniques themselves; and coaching all dental students regarding patient/operator positioning and using ultrasonic scaling devices. In addition, Barbara enjoys the traditional dental hygienist's role in the private practice of the Head of the Department of Periodontics.

One of the highlights of her week in terms of challenge is the time she spends working with the Dean of the Dental School at the Regional Psychiatric Centre (Federal Prison), providing dental services for the inmates. Carefully monitored by security guards, she performs assisting, dental nursing, and dental hygiene duties.

In a typical week she would follow this schedule:

DAY	A.M.	P.M.
Monday	Third Year Operative	Regional Psychiatric Unit
Tuesday	Periododontic Clinic	Professional Practice and Consultation Unit, University of Saskatchewan (Traditional dental hygiene duties - Perio Practice)
Wednesday	Periodontic Clinic	Regional Psychiatric Centre
Thursday	Private Practice	Private Practice
Friday	Professional Practice and Consultation Unit, (Traditional dental hygiene duties - Perio Practice)	Periodontic Clinic

Before her employment at the dental school, Barb spent her week, like many of us, running to several different practices where she performed both dental hygiene and (unlike the most of us) dental nursing duties.

As a dually licensed auxiliary, Barb was able to perform restorative and preventive techniques such as cutting the preparations, placing and finishing amalgam and composite restorations, inserting space maintainers, preparing teeth and placing stainless steel crowns, performing deciduous pulpotomies, and extracting deciduous teeth, in addition to providing traditional hygiene duties. One office considered her their general practice periodontist and assigned her mainly perio-related duties. This was all very exciting and challenging for a graduate hygienist of only a few months; however, she found that the racing from one practice to the next created a lack of routine in her life, besides being quite exhausting. More important was the fact that she did not really feel she belonged in any one of the practices.

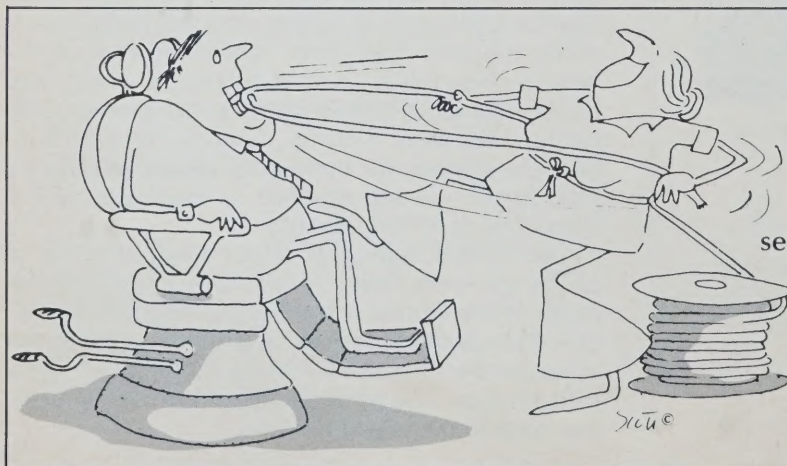
In spite of these feelings, Barb insisted on being booked enough time to do the best possible treatment for each patient. In response to my query as to how she managed an employer's request to book patients each half hour, she replied, "Oh, I don't do that. I can't do a complete job in half an hour, unless I can have them back."

Barb chose to become a dental hygienist because it offered responsibility beyond the scope of dental nursing and the potential to increase her career's upward mobility and portability from province to province. She has been very happy with this choice and intends to return to university, perhaps part-time at first, to complete her degree in education. (She has completed one year of arts and sciences.)

Education and professional deportment rank highly on this hygienist's list of interests. There is always time in her busy life for the concerns of her profession. Presently she serves the Saskatchewan Dental Nurses' Association as President and Dental Auxiliary Liaison Representative and participates in the Saskatchewan Dental Hygienists' Association. She always has, as she puts it, "an ear open to any concerns that may be shared by auxiliaries".

Barb's dental nurse/hygienist position did not exist one year ago. Initially the job consisted of part-time employment with the periodontist, but by promoting her capabilities and potential usefulness at the Faculty of Dentistry, Barb was able to develop and secure a challenging position which offers variety and opportunity for growth. She recommends the use of extreme tact, the demonstration of willingness to work ("get on lots of committees and get to know the people in charge"), and an open mind, if you are interested in shaping a similar position for yourself.

I think this hygienist makes a superb role model for our profession — open, interested, willing to tackle something new. She may be a pioneer in this field, but her way is the way of the future.



Original Hygiene Hasty Notes
by Sue Scott ©

To order your package of 8 notes
(4 different situations in all)
send your \$3.25 cheque or money order to:

**The Toronto Central Component
Dental Hygiene Society**
c/o Mrs. Helen Saris
601 - 1175 Broadview Avenue
Toronto, Ontario M4K 2S9

Alternative: Working with the Mentally Retarded

Margaret Kolthammer, R.D.H.

□ □ □
The ward staff are my best resource. They know the residents' habits and prepare me for the unexpected (scratching and biting). However, all residents know me by sight now, and I am often able to do more than the regular staff because the residents know it is my job.

□ □ □

Tranquille is a residential and training facility for about four hundred mentally retarded people, aged six to seventy-seven, operated by the Ministry of Human Resources in Kamloops, British Columbia. I have been the dental hygienist here since June of 1979.

In the beginning there was a period of adjustment for myself, the direct care staff, and the residents. I was terrified, the staff had another professional to handle, and the residents did not know what to expect. I decided to begin my work with the children who attended school. They were mildly to moderately retarded and would provide a transition for me from working with the public. One of my first joys came when I went to an area of teenagers with the intention of teaching them to floss. When each of them wrapped the floss as I did and placed it interproximally, I was sure I'd found Utopia . . . not one complaint or excuse. It was encouraging to have at least one group of patients who showed the manual dexterity to floss and the desire to please the staff.

I scheduled my first hygiene office appointments with residents from an adult ward who had recently been examined by the dentist. Although my first goal was to educate the children, these adults became my second priority because some of them eventually would leave Tranquille to live in boarding homes where independence is encouraged. I worked directly with these people to improve their toothbrushing technique. Some took up flossing, but others brought me back to the real world complaining that flossing takes too long and was too hard. From there I continued to wards of more severely retarded and disabled (cerebral palsy) residents. In these areas, education of the

direct care staff was my goal. Electric toothbrushes were successfully introduced to some of these residents. For brushing the teeth of the uncooperative, I devised a cheek squeeze trick. Once the patient opened, I squeezed the cheek between the teeth which provided more time for lingual brushing because they weren't as eager to clamp shut.

Prior to my coming to Tranquille many sedations were required before any dental treatment could be done. Because of my regular ward visits, the residents and I have reached a level of trust and understanding. All treatment is first attempted without sedation. Usually minor patient objections can be tamed by simple restraint. When all else fails, we go to the local hospital for dental work under general anaesthetic, and on those days I am "Scrub Nurse I" in the operating room.

Throughout my first round of Tranquille, I saw repeated evidence of the importance of diet. The controlled diet of the institution contributed to a low decay rate, but many residents visited the Canteen daily to buy candy. The residents on locked wards had a lower decay rate than those with the choice of going to the Canteen daily. Patients who choked on regular food received a soft diet and exhibited increased periodontal involvement.

□ □ □

Some patients exhibit involuntary bite reflexes which causes them to clamp down on my finger. My scream of pain is often startling enough to make them open their mouth briefly.

□ □ □

I have been bitten, scratched, kissed, kicked, and hugged by the residents of Tranquille. If someone becomes agitated, they may strike out at me, another staff member or resident, or at themselves. I have found that it is important to realize the point at which treatment must stop. A resident may behave well for me, leave the room and hit someone else or start banging his own head against a wall. The staff are well aware of a resident's tolerance level and I rely on their judgement. Profoundly retarded individuals do not gain experience by visiting the dental office. For these people, I do as much work as possible on their home ward. Stress is reduced because the surroundings and staff are familiar to them.

My regular week involves a number of activities. Mondays are spent assisting the dentist. Preparing for his day and completing the follow-up paper work usually takes another half-day. The dentist does examinations of our residents twice a year and recommends scaling when necessary. After that, I am able to proceed booking dental hygiene appointments at my convenience. (In British Col-

umbia, it is not imperative that my work be directly supervised by a dentist as long as I only do the procedures prescribed by a dentist.) A sideline to my job at Tranquille is to make appointments for assist, and keep charts for a podiatrist and an orthotist. Because of my liaison with these professionals, I have been nick-named the "Foot and Mouth lady". Two to six times a week, I visit wards after breakfast or lunch and involve myself in the brushing routine. A few hours a week are spent in meetings or attending lectures given by other professionals. Clinical dental hygiene, be it dental office appointments or scaling on the ward, occupies about one-quarter of my time.

My rounds of the institution take six to eight months. I send memos to the wards regularly to let them know which area I'm presently working with to offer dental health information, or to specify requirements for particular residents. I also submit pearls of hygiene news to the Tranquille Newsletter every few months.

Preparation for this job began in dental hygiene school at the University of British Columbia where I worked with slow learners in the school program. I spent some time at the G.F. Strong Rehabilitation Centre in Vancouver, and did clinical work on one retarded adult male. After two-and-one-half years in private practice, I took an auxiliary position in dental public health with a school brushing program. This led me to inspections and brush-ins at the Tranquille school.

Seeing those unhealthy mouths encouraged me to give two lectures to the staff who cared for these children. Because of my interest, I was urged to submit an application to their posting for a dental hygienist.

□ □ □

In my twenty-two months at Tranquille, I have gained a better understanding of the term mentally retarded. I have seen the complications of drug therapy, Down's syndrome, cerebral palsy, severe bru-
ism, and diet. Although it is impossible to know what the retarded understand, I firmly believe they comprehend a state of wellness and appreciate a clean mouth.

□ □ □

The beauty of a job like mine is the total independence of setting up a dental health program, the challenge of motivating staff and residents, and the satisfaction of improving the oral health of a special group of people. Difficulty comes when my self-motivation wears thin and there is a lack of other dental personnel around to remotivate me. In June of 1979, I claimed my goal was to improve the dental awareness of Tranquille's residents. With the help of the direct care staff, I feel it has been accomplished.

Directory 1980-1981

EXECUTIVE COUNCIL:

- PRESIDENT:** Margaret Bailey, Box 2228, Kindersley, Saskatchewan S0L 1S0. Res. (306-463-2397). Bus. (306-463-4661).
- PRESIDENT-ELECT:** Pat Grant, 3 Linden Lane, Halifax, Nova Scotia B3R 1N1. Res. (902-477-9876).
- FIRST VICE PRESIDENT:** Linda Berry, 1755 Bough Beeches, Mississauga, Ontario L4W 2B7. (416-624-3495).
- SECRETARY:** Mary Anne Wailing, Box 221, Young, Saskatchewan S0K 4Y0. Res. (306-259-2024). Bus. (306-664-6372).
- TREASURER:** Linda Wiens, 719-3rd Street East, Saskatoon, Saskatchewan S7H 1M4. Res. (306-242-6965). Bus. (306-652-0120).
- IMMEDIATE PAST PRESIDENT:** Diane Girardin, Box 22, La Salle, Manitoba R0G 1B0. Res. (204-736-4066). Bus. (204-233-7726).

THE BOARD OF DIRECTORS:

- BRITISH COLUMBIA:** Barbara Hewton, 2709 Marine Drive, West Vancouver, B.C. V7V 1L7 (604-926-2180); Evelyn McNeen, #311 - 1385 Draycott Road, North Vancouver, B.C. V7J 3K9 (604-987-2821); Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- ALBERTA:** Laura Mowat, 11424-161 Avenue, Edmonton, Alberta T5X 2L1. (403-456-0977); Winnifred MacDonald, 72 Colleen Cres., S.W., Calgary, Alta. T2V 2R3 (403-253-6178).
- SASKATCHEWAN:** Barbara Ferris, 5107-222 Fairmont Drive, Saskatoon, Saskatchewan S7M 4P5 (306-382-3348).
- MANITOBA:** Gladys Syrnky, 157 Academy Road, Winnipeg, Manitoba R3M 0E2. (204-453-0562).
- ONTARIO:** Judy Barnes, 74 Keewatin Avenue, Toronto, Ontario M4P 1Z8. (416-481-7507); Linda McCance, 5027 Wixon Street, Clairmont, Ontario L0H 1S0. (416-649-2056); Ailsa Wood, 505-160 Balmoral Avenue, Toronto, Ontario M4V 1J7. (416-923-1669); Rosemary Arseneault, 92-B McDougall Rd., Waterloo, Ontario N2L 5C5. (519-884-4216); Jasmine Holetich, 1871 King St. East, Hamilton, Ontario. L8V 2P3 (416-549-5048); Linda Perron, 712-101 Governor's Road, Dundas, Ontario. L9H 6L7. (416-627-7193).
- QUEBEC:** Lucie Billette-Raychat, 4641 Cumberland Street, Montreal, Quebec H4H 2L5.
- NEW BRUNSWICK:** Jane Cummings, 487 Westmoreland St., Fredericton, N.B. E3B 3M8 (506-455-4087).
- NOVA SCOTIA:** Peggy Larder, 6150 Regina Terrace, Halifax, N.S. R3H 1N5 (902-329-4166).
- PRINCE EDWARD ISLAND:** Jean MacLean, 6 Newland Crescent, Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- NEWFOUNDLAND:** Lois Bowden, 189 LeMarchant Rd., St. John's, Newfoundland A1C 2H5 (709-579-3259).

SPECIAL COMMITTEE CHAIRMEN:

- CONTINUING EDUCATION:** Marnie Forgay, 780 Bannatyne Ave., Winnipeg, Manitoba R3E 0W3 (204-786-3683).
- EDUCATION:** Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4 (204-889-4890).
- FINANCE:** Linda Wiens, 719-3rd Street, East, Saskatoon, Saskatchewan S7H 1M4 (306-242-6965).
- STUDENT MEMBERSHIP:** Cara Tax, B-652 Cavalier Drive, Winnipeg, Manitoba R2Y 1C1. (204-889-6372).

APPOINTEE OFFICERS:

- EXECUTIVE SECRETARY:** Judy Dickey, 46 James St., Aylmer, Quebec J9H 4S6. (819-684-9102).
- EDITOR:** Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2. (219-254-6224).
- BOOKKEEPER:** Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (416-923-1669).

EXECUTIVE APPOINTMENTS:

- SPEAKER FOR THE BOARD:** Ms. Joanne Clovis, #1-14310-80 Street, Edmonton, Alberta T5C 1L6. (403-476-6596).
- CONVENTION CHAIRMAN:** 1981: Molly Moore, 331 Pumphill Crescent, Calgary, Alberta T2V 4M2. (403-259-6031).
- A.C.F.D. DENTAL HYGIENE SECTION:** Carol

Worobey, 516 Oakenwald Avenue, Winnipeg, Manitoba R3T 1M2 (204-453-3825).

- DENTAL AUXILIARY LIAISON OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Saskatchewan S4T 1L6. (306-569-1603).
- INTERNATIONAL LIAISON CHAIRMAN:** Sharon French, 13 Hobbs St., Nepean, Ontario K2H 6W8. (613-820-1196).
- DATA BANK REPRESENTATIVE:** Pat Johnson, Oak Deane, R.R. No. 2, Aurora, Ontario L4G 3G8. (416-727-1433).
- CDA COUNCIL ON HEALTH CARE:** Kate MacDonald, 3914 Göttinger St., Halifax, N.S. B3K 3G7. (902-445-8868).
- CDA COUNCIL ON EDUCATION:** Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4. (204-889-4890).
- CSA TECHNICAL COMMITTEE ON DENTISTRY:** Anne Bosy, 1529 Ballyclare Drive, Mississauga, Ontario L5C 1J4. (416-270-4019).
- OFFICER OF CDHA ORGANIZATION AND PROCEDURES:** Marjorie Dimitri, 1606 Ayleslynn Drive, North Vancouver, B.C. V7J 2T3. (604-987-7392).

STANDING COMMITTEES:

MEMBERSHIP:

- CHAIRMAN:** Jo Gardner, 1125 West 54th Ave., Vancouver, V6P 1N3. (604-261-8642).
- B.C.:** Cassed Parsons, 1049 West Keith Rd., North Vancouver, B.C. V7P 1Y6. (604-986-4620).
- Alta.:** Susan Barry, Two Hills, Alberta T0E 4K0.
- Sask.:** Darlene Armstrong, 43-35 Centennial St., Regina, Saskatchewan S4S 6P8. (306-586-9457).
- Man.:** Cara Tax, B-652 Cavalier Drive, Winnipeg, Manitoba R2Y 1C1. (204-889-6372).
- Ont.:** Debbie Van Dyke, 23-1919 Lakeshore Road W., Mississauga, Ont. L5J 4J9. (416-822-5102).
- Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1. (514-352-6245).
- N.B.:** Jean McGinis, R.R. 219-4, Rothesay, N.B. E0G 2W0. (506-849-2240).
- N.S.:** Gail Place, 201-5475 Inglis St., Halifax, N.S. B3H 1J6. (902-422-5424).
- P.E.I.:** Florence Wall, Mt. Herbert, R.R. 5, Charlottetown, P.E.I. C1A 7J8. (902-569-2079).
- Nfld.:** Lois Bowden, 189 LeMarchant Rd., St. John's, Newfoundland A1C 2H5. (709-579-3259).

MANPOWER AND UTILIZATION:

- CHAIRMAN:** Elaine Good, 26 Christine Cres., Kitchener, Ontario N2B 2M1. (519-576-2783).
- B.C.:** Gail Thorp, 304-396 West 1st St., North Vancouver, B.C. V7M 1B6. (604-980-5165).
- Alta.:** Ila Seabrook, 54 Woodlake Cres., Sherwood Park, Alta. (403-467-1730).
- Sask.:** Irene Ekberg, 46 Hawkes Ave., Regina, Saskatchewan S4X 1B4. (306-543-1905).
- Man.:** Robyn Enns, 97 Wilkinson Cres., Portage La Prairie, Manitoba R1N 1A7. (204-857-6737).
- Ont.:** Jenny Thomas, 2759 Selina Street, Ottawa, Ontario K2B 6P8. (613-820-0405).
- Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Que. H1S 2Z1 (514-352-6245).
- N.B.:** Christine Robb, 5 Sixth Street, Moncton, N.B. E1E 3G5. (506-388-4123).
- N.S.:** Linda Zambolin, 114 Regal Rd., Dartmouth, N.S. B2W 4H8. (902-434-8983).
- P.E.I.:** Heather Keith, 4 Belvedere Ave., Charlottetown, P.E.I. C1A 6A8. (902-892-9361).
- Nfld.:** Lois Bowden, 189 LeMarchant Rd., St. John's, Nfld. A1C 2H5 (709-579-3259).

COMMUNITY DENTAL HEALTH:

- CHAIRMAN:** Dale Scanlan, 53 Ariel Court, Nepean, Ontario K2H 8J1. (613-828-7962).
- B.C.:** Joanna Bravo, 1825 MacDonald St., Vancouver, B.C. V6K 3X7. (604-732-1574).
- Alta.:** Joanne Clovis, 1-14310 80 St., Edmonton, Alberta T5C 1L6 (403-476-6596).
- Sask.:** Karen Tadei, 101-2905 7th St. E., Saskatoon, Saskatchewan S7H 1B1 (306-374-1865); Melanie Fjoser, 69C-3525 Avonhurst Dr., Regina, Saskatchewan S4R 3K2 (306-545-2035).
- Man.:** Kim Brown, 58 Edgemont Drive, Winnipeg, Manitoba R2J 3H9 (204-257-0559).
- Ont.:** Fern Bowler, 2906-2 Forest Laneway,

Willowdale, Ontario M2N 5X7 (416-224-5954).

- Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1 (514-352-6245).
- N.B.:** Barbara Ash, Dept. of Health, P.O. Box 93, St. John, N.B. E2L 3X1 (506-658-2531).
- N.S.:** Sandra Burrell, 6281 Duncan St., Halifax, N.S. B3H 2Y8. (902-429-1888).
- P.E.I.:** Pat Stewart, Travellers Rest, Summerside, P.E.I. (902-436-2709).
- Nfld.:** Lois Bowden, 189 LeMarchant Rd., St. John's, Nfld. A1C 2H5 (709-579-3259).

CONSTITUTION:

- CHAIRMAN:** First Vice-President.
- B.C.:** Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- Alta.:** Marg Suss, 306-9925 91 Ave., Edmonton, Alberta T6E 2T7 (403-433-5332).
- Sask.:** Joan Foster, 345 Laurier Dr., Swift Current, Saskatchewan S9H 1L3 (306-773-8754).
- Man.:** Ruth Konzelman, 105 Oliver Ave., Selkirk, Manitoba R1A 0C4 (204-482-6122).
- Ont.:** Dale Scanlan, 53 Ariel Court, Nepean, Ontario K2H 8J1 (613-828-7962).
- Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z2 (514-352-6245).
- N.B.:** Anne Marie Gorham, P.O. Box 715, Fredericton, N.B. E3B 5B4 (506-454-9358).
- N.S.:** Linda Zambolin, 114 Regal Rd., Dartmouth, N.S. B2W 4H8 (902-434-8983).
- P.E.I.:** Debbie Richard, 19 Milbrook Dr., Charlottetown, P.E.I. C1A 7V2 (902-569-4490).
- Nfld.:** Lois Bowden, 189 LeMarchant Rd., St. John's, Newfoundland A1C 2H5 (709-579-3259).

NOMINATIONS:

- CHAIRMAN:** Pat Grant, 3 Linden Lane, Halifax, N.S. B3R 1N1 (902-477-9876).
- B.C.:** Barbara Hewton, 2709 Marine Dr., West Vancouver, B.C. V7V 1L7 (604-926-2180).
- Alta.:** Paulette Schulte, 10947 36A Ave., Edmonton, Alberta T6T 0E3 (403-434-0925).
- Sask.:** Debbie Lang, 635 10th Ave. E., Prince Albert, Saskatchewan S6V 6W7 (306-763-3206).
- Ont.:** Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (406-923-1669).
- Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1 (514-352-6245).
- N.B.:** Christine Robb, 5 Sixth St., Moncton, N.B. E1E 3G5 (506-388-4123).
- N.S.:** Kim McGrail, 3 Beech St., Bedford, N.S. B0N 1B0 (902-835-8093).
- P.E.I.:** Jean McLean, 6 Newland Cres., Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- Nfld.:** Lois Bowden, 189 LeMarchant Rd., St. John's, Newfoundland A1C 2H5 (709-579-3259).

FINANCE:

- Linda Wiens, 719-3rd St. E., Saskatoon, Saskatchewan S7H 1M4 (306-242-6965).**
- Judy Dickey, 46 James St., Aylmer, Quebec J9H 4S6 (819-684-9102).**
- Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (416-923-1669).**

PROVINCIAL NEWSLETTER EDITORS

- B.C.:** Patty Bowman, 926 W. 22nd Ave., Vancouver, B.C. V5Z 2A1 (604-736-0922).
- Alta.:** Sherry Sanderson, 107 Cumberland Dr., N.W., Calgary, Alberta T5K 1S9 (403-289-1059).
- Sask.:** Teri Gottselig, 98 Lockwood Rd., Regina, Saskatchewan S4S 3C2 (306-525-5136).
- Man.:** Joanne Presunka, 1041 Howard Ave., Winnipeg, Manitoba R3T 1S1 (204-284-7143).
- Ont.:** Jane Rogers, 10 Lyle Place, Kitchener, Ontario N2B 2J6 (519-576-3718).
- Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1 (514-352-6245).
- N.B.:** Mary Pelletier, Site 5, Comp 18, R.R. 8, Moncton, N.B. E1C 8K2 (506-384-8728).
- N.S.:** Gail Ward, 6299 Allan St., Halifax, N.S. B3L 1C8 (902-423-2925).
- Nfld.:** Pam Vokey, P.O. Box 205, Gander, Newfoundland A1V 1W6.

Classified Advertising

Advertising copy should be directed to Graphic Media,
2646 West 3rd Avenue, Vancouver, B.C. V6K 1M3.

Classified advertising rates: \$15.00 per column inch. Remittance
must accompany ads.

DENTAL HYGIENIST

Full-time position available in Ashcroft, B.C. on the beautiful South Thompson River near Kamloops. If you are looking for an exciting challenging position with emphasis on prevention, motivation, and top remuneration, this could be for you.

Contact:

Ashcroft Management Ltd.
Box 700, Ashcroft, B.C.
or Phone (604) 453-9147

Dental Hygienist required immediately for West Vancouver office. Please contact Dr. J.K. Higa, 110 Park Royal, West Vancouver, B.C. V7T 1A2. Telephone: 922-5711.

DENTAL HYGIENIST NEEDED

A career-minded dental hygienist is required to help a general practice with its periodontal work. The Okanagan Valley in central British Columbia provides a lifestyle surpassed by few areas.

This dental practice provides an opportunity to experience all facets of dentistry.

Please contact:

Dr. Marke Pederson
102-3401 33rd Street,
Vernon, B.C. V1T 7X7
(604)545-3319

DENTAL HYGIENE position available full-time in a family preventive practice. Interested applicants please send resume to: Dr. D.W.

Sharp, 7 Riverview Dr., Guelph, Ontario N1E 3R6. Telephone: 519-824-7930.

Dental Hygienist required: Full or part-time. Excellent salary and working conditions in beautiful B.C. interior — ideal recreation area. Please contact: Dr. D.W. Ellis, 1100 - 3rd St., Castlegar, B.C. V1N 1Z9 or call 365-3339.

Dental office in sunny Kelowna requires enthusiastic hygienist. Wages \$1500-\$2000 /mo. Phone Dr. Kurio 604-762-6414 or send resume to 205-1626 Richter St., Kelowna, B.C. V1Y 2M3.

Civilized Victoria, B.C. Dental Hygienist required in busy family general practice for 4-5 days per week. Please contact Dr. Andrew Glen at 2155 Sooke Road, Colwood, Victoria, B.C. V9B 1W4. (604) 478-2354.

Hygienist required, full-time, 4 day week in Kamloops. The city is growing but housing is still reasonable. Contact: Dr. D.B. Dextraze, 554-1954 (Kamloops).

Wanted — Dental Hygienist for a 3 man family preventive oriented practice. In Medicine Hat, Alberta. City of 40,000 people. Reply Dr. Gregory #304-578 3rd St. S.E., Medicine Hat, Alberta T1A 0H3. Phone 527-5526.

Call for Applications for the Position of EXECUTIVE SECRETARY

The Canadian Dental Hygienists' Association is seeking an Executive Secretary. The successful candidate should be a person with excellent secretarial skills, who would be responsible for providing administrative support to the elected officials of our Association. This is a part-time position and salary is commensurate with experience. Please reply in writing before August 1, 1981 to:

CDHA President
Box 2228
Kindersley, Saskatchewan
S0L 1S0

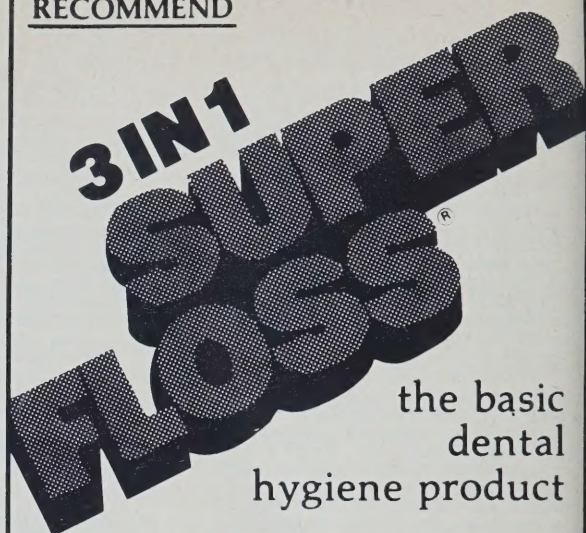
INDEX TO ADVERTISERS

IFC Dentsply International, 29 John O. Butler,
34 Colgate Palmolive, 39 Horner, 41 Hu-Friedy,
48 Marpo-Dent, OBC Proctor and Gamble.

Answers to Self Assessment Test

1. b; 2. d; 3. b; 4. c; 5. b; 6. c; 7. d; 8. e; 9. c; 10. f.

RECOMMEND



THREADER

FILAMENT BRUSH

UNWAXED FLOSS

SUPER FLOSS provides both a floss and a special filament brush for removal and clearance of plaque and food debris from interproximal spaces. Removal and clearance of plaque and food debris are the complementary elements of maximum efficacy.

**Now clinically proven
superior to regular
dental floss by leading
American and
European University —
Dental Schools**

The SUPER FLOSS filament brush is constructed of 204 tiny nylon filament "springs". These filament springs become straight and parallel with either elongation or lateral forces. The result is a brush that can compress down to the diameter of the floss section in order to clear out smaller interproximal spaces. The filament springs automatically revert to a coiled state when relaxed. The result is a brush with a "memory" characteristic and allows for repeat usage and good durability.

PROFESSIONAL PRICE LIST

Patient Pack - \$119.00 - 144 instruction
printed poly bags of 30 cleaners each
(4320 cleaners)

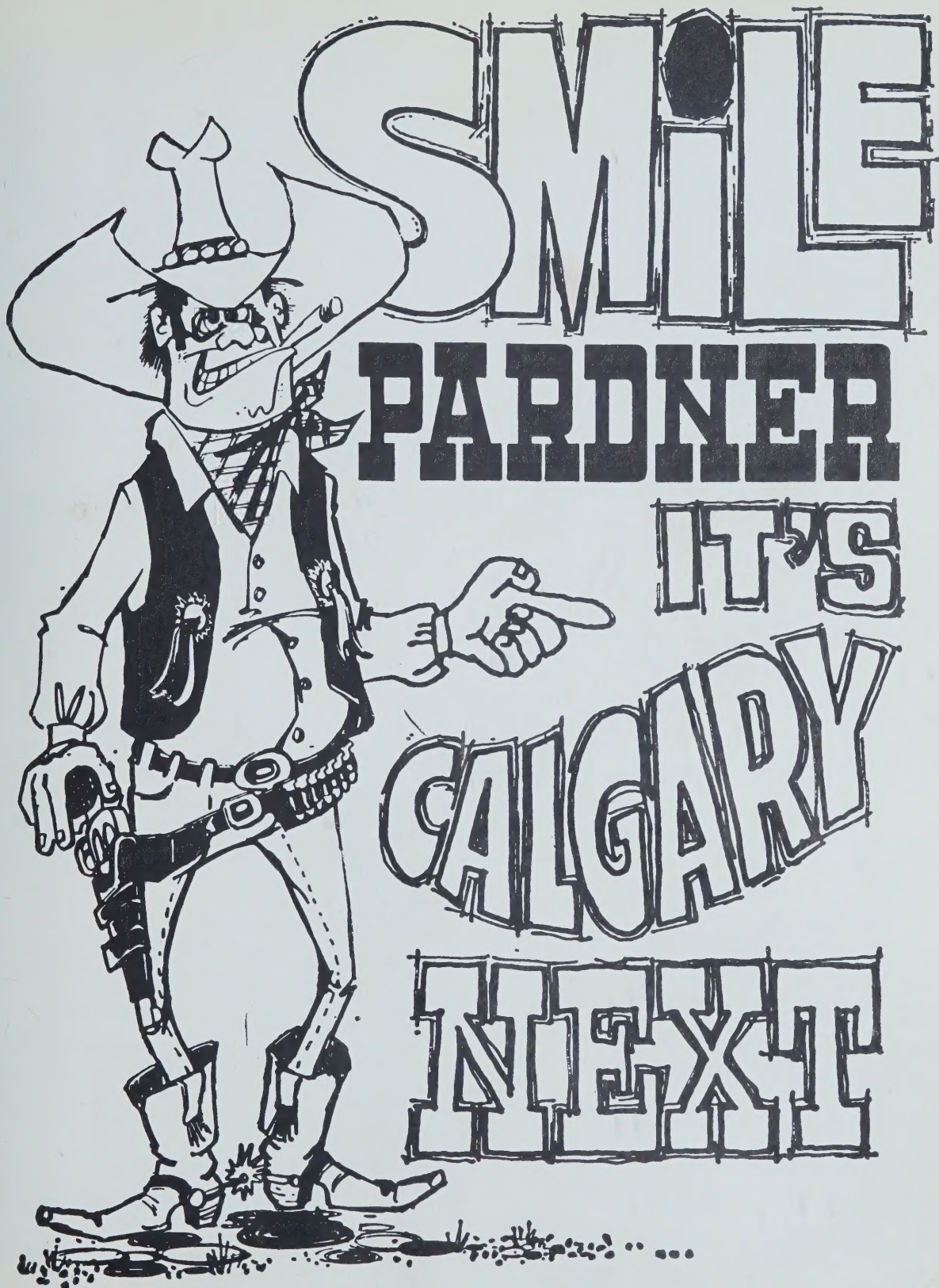
Pro-Pack - \$21.95 - 2 poly bags of 500
cleaners each.

Now available at drug stores. Patients
can order directly by mail.



marpo-dent products

10569 - 111 Street,
Edmonton, Alberta. T5H 3E8
Phone (403) 426-3720



CDHA Convention '81: Aug. 31, Sept. 1, 2

Major new clinical evidence shows...

Crest has achieved a significant step forward in its anticaries protection

New Improved Formula Crest, which uses sodium fluoride in a hydrated silica abrasive system, provides significantly more anticaries protection than previous Crest. These results were demonstrated in the largest dentifrice clinical study ever published! A second major study² also demonstrated the improved anticaries effectiveness of the new formula.

The new product has been pH-stabilized and formula-balanced to provide more fluoride to react with tooth enamel.

For further information please write to: Mr. H. R. Hamilton, Professional Services Division, P.O. Box 355, Station "A," Toronto, Ontario M5W 1C5.

Improved protection from
Improved Formula Crest

New Improved
Formula Crest 40.7%

Previous
Crest 23.4%

1. Zacherl, W. A., "Clinical Evaluation of a Sodium Fluoride-Silica Abrasive Dentifrice." *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

2. Beiswanger, B. B., Gish, C. W. and Mallatt, M. E., "Effect of a Sodium Fluoride-Silica Abrasive Dentifrice Upon Caries." *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

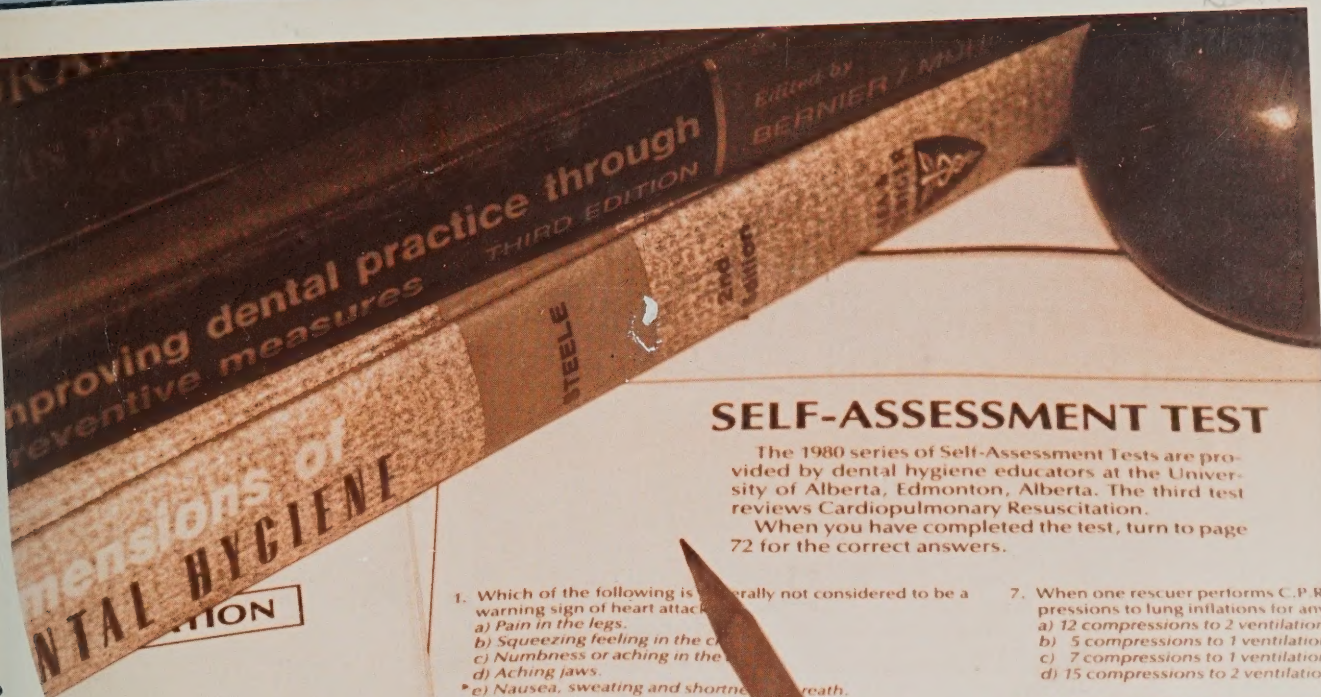
NEW! IMPROVED FORMULA!
Crest

for even better anticaries
protection within your
preventive program

UNIVERSITY OF TORONTO
DENTISTRY
TORONTO, CANADA
JAN 20 1985

"Crest contains sodium fluoride which is, in our opinion, an effective decay preventive agent, and is of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

CANADIAN DENTAL ASSOCIATION



SELF-ASSESSMENT TEST

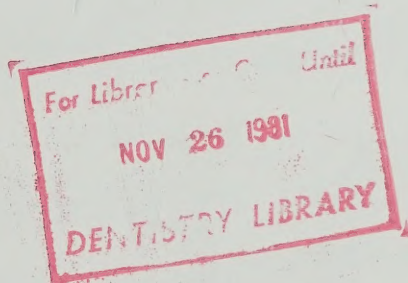
The 1980 series of Self-Assessment Tests are provided by dental hygiene educators at the University of Alberta, Edmonton, Alberta. The third test reviews Cardiopulmonary Resuscitation.

When you have completed the test, turn to page 72 for the correct answers.

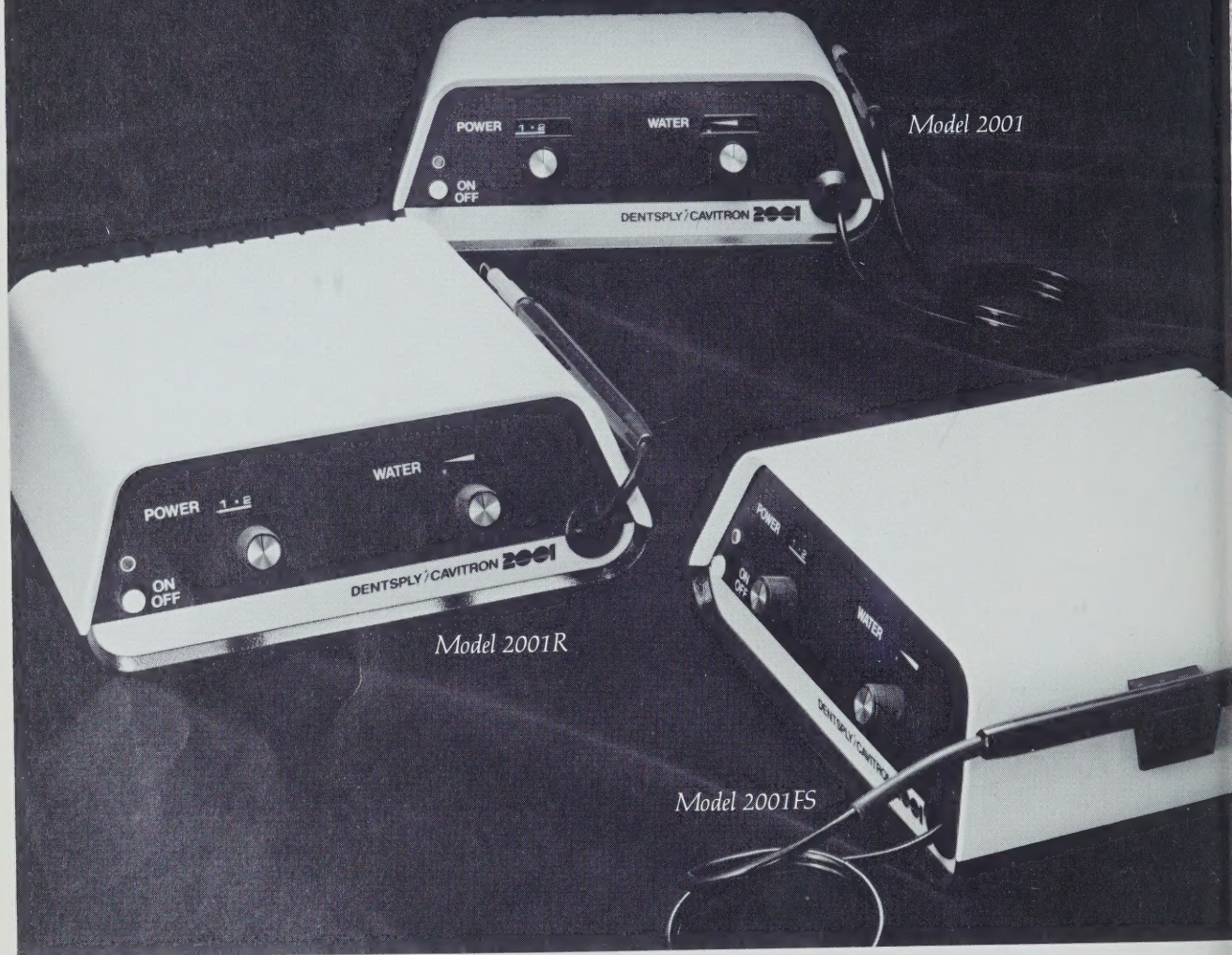
1. Which of the following is generally not considered to be a warning sign of heart attack?
a) Pain in the legs.
b) Squeezing feeling in the chest.
c) Numbness or aching in the arms.
d) Aching jaws.
e) Nausea, sweating and shortness of breath.
2. The greatest risk of death from a heart attack is within:
a) the first two hours after onset of symptoms.
b) the first eight hours after onset of symptoms.
c) the first twelve hours after onset of symptoms.
d) the first twenty-four hours after onset of symptoms.
3. C.P.R. is unlikely to restore a victim to his pre-arrest level of brain function if cardiac arrest has persisted more than:
a) 1-2 minutes.
b) 2-4 minutes.
c) 3-5 minutes.
d) 4-6 minutes.
4. When two rescuers are performing C.P.R. the first rescuer should give chest compressions:
a) should pause after every fifth compression, while the second rescuer gives ventilations.
b) should pause after every twentieth compression, while the second rescuer gives ventilations.
c) should not pause while the second rescuer intervenes during the sequence of each fifth compression.
d) should not pause after compressions, except in the case of a conscious victim.
5. When one rescuer performs C.P.R. compressions to lung inflations for any:
a) 12 compressions to 2 ventilations.
b) 5 compressions to 1 ventilation.
c) 7 compressions to 1 ventilation.
d) 15 compressions to 2 ventilations.
6. Artificial circulation is produced by pressing by squeezing the heart between:
a) the clavicle and the scapula.
b) the sternum and the spine.
c) the clavicle and the spine.
d) the sternum and the xiphoid process.
7. How far down should you depress cardiac compression on an adult?
a) 1/2 - 1 inch.
b) 1 1/2 - 2 inches.
c) 2 - 2 1/2 inches.
8. For a conscious victim with a coin the rescuer should first:
a) perform a finger pulse to see if there is a pulse.
b) deliver 8 manual breaths and pulse.
c) deliver 4 back blows and pulse.
d) deliver 4 back blows and 4 manual breaths.

the Canadian dental hygienist

the Canadian dental hygienist



The Dentsply-Cavitron® 2001 Series.



Model 2001

Model 2001R

Model 2001FS

Three different choices in the way you operate... one superb level of performance.

All three models deliver the same gentle, efficient, reliable performance Dentsply-Cavitron units are famous for. All three provide up to 28 watts of scaling power with automatic insert tuning, solid state circuitry and visual water flow control. Choose the operating features best suited to your style of practice:

The Model 2001FS has an "on-off" fingerswitch, which many dentists find

contributes to more continuous and efficient scaling procedures. Flick "on" for instant activation of the unit. Flick again for "off". There is no foot control.

The Model 2001R offers conventional foot control operation and the convenience of automatic handpiece retraction.

The Model 2001 has a plug-in handpiece and cable assembly with conventional foot control.



These Dentsply-Cavitron Ultrasonic Scaling Devices are Acceptable for use in scaling and cleaning surfaces of teeth in conjunction with other suitable prophylactic measures.

**DENTSPLY®
Equipment**

D Dentsply Canada, Ltd.
Toronto, Ontario M5T

© 1981 Dentsply International Inc.
All rights reserved.

The Canadian Dental Hygienist L'Hygieniste Dentaire du Canada

ALL 1981 AUTOMNE

VOLUME 15, NO. 3

Articles/Articles

- 4 Assessing the Oral Health Status of Rankin Inlet's Schoolchildren, S.C. Gelskey
and P.G. Hando-Lowes.
- 6 What Do You Know About Lupus Erythematosus? A. Gutzmann.

Features/Reportage

- 0 Comment: It's My Turn, M. Kolthammer.
- 7 Book Review: Essentials for Periodontics, E. Jesin.
- 8 Self-Assessment Test: Restorative Procedures and Materials.
- 9 Special Membership Section
- 4 October is CFDE/FCED Month.
- 9 Alternative: Providing Preventive Services for Native People of Canada, S. Hemming.

Departments/Sections

- | | | |
|---------------------|----|------------------------|
| 1 Newline | 72 | Classified Advertising |
| 1 Directory 1981-82 | 72 | Index to Advertisers |

THE CANADIAN DENTAL HYGIENIST is the official journal of the Canadian Dental Hygienists' Association and is published quarterly.

All journal communications should be directed to the Editor, except subscription and advertising matters which should be addressed to the respective staff members.

Subscription rates for non-members are: \$15.00 per year in Canada and \$22.50 per year foreign.

The opinions expressed in editorials or articles are those of the authors and do not necessarily represent the views of the Association, the Publisher or the Editor.

L'HYGIENISTE DENTAIRE DU CANADA est la revue officielle de l'Association des hygiénistes dentaires du Canada et est publiée à tous trois mois.

Toutes communications ayant trait à la revue devraient être adressées au Rédacteur en chef, à part les abonnements et tout ce qui concerne la publicité, ce qui, de leur côté, devraient être adressés aux membres du personnel respectifs.

Les tarifs d'abonnements pour les non-membres sont les suivants: \$15.00 par année au Canada et \$22.50 par année en pays étranger.

Les opinions exprimées dans les éditoriaux ou dans les articles de ceux des auteurs et ne représentent pas nécessairement les points de vue de l'Association, de l'Éditeur ou du Rédacteur.

Editor/Redacteur en chef
Stephanie Nagle, 2221 Victoria Avenue,
Windsor, Ontario N8X 1R2

Publisher/Editeur;
Advertising Manager/Gérant de la publicité;
Subscriptions Manager/Gérant des abonnements
Doug Gordon, Graphic Media
2646 West 3rd Avenue,
Vancouver, B.C. V6K 1M3

Advisors/Counseillers
Joan Voris, 3589 Osler Street,
Vancouver, B.C. V6H 1M3

Marjorie Dimitri
1606 Ayleslynn Drive
North Vancouver, B.C. V7J 2T3

Louise Gosemick
8078 De Lorimier,
Montreal, Quebec H2E 2P9



MEMBER PUBLICATION
AMERICAN ASSOCIATION OF DENTAL EDITORS
617 6 / CN ISSN 0008-3380

It's My Turn

1 981 is the Year of the Disabled. The handicapped of Canada are telling us daily, "It's my turn". I wish to make an appeal on their behalf — an appeal for the same dental care we give others. All over the country there are men and women, the staff and residents of institutions and homes, eager to learn home care skills and receive the treatment they deserve.

The physically and mentally handicapped people in our society have been sheltered from the outside world and we have been sheltered from the institutionalized world. It is time to accept and prepare ourselves and our communities for these fellow human beings.

Because priorities have been laid down in the past, self-feeding and dressing have been taught, but dental care has often been neglected. Even though personal hygiene has become important, education in toileting and keeping the outside of the body clean has been the rule. Care of the mouth is overlooked, as it is by many people in the private sector. Until there is a complaint of pain, treatment is not sought. This cannot be blamed on staff. They are kept busy supplying the essential needs. With proper education of the staff, any time spent on mouth care can be effective.

The primary goal must be prevention. Certainly in the institutions, the controlled diet is responsible for less tooth decay. Drugs (anti-epileptics), soft diets (fed to chokers), and a lack of thorough daily cleaning result in gum diseases of varying degrees.

The mentally handicapped tend to have few teeth in later years because of the progression of periodontal disease or because the dentist chooses extraction over restoration. If the tooth cannot be easily restored and the patient is uncomfortable, unmanageable, or in severe pain, then extraction becomes the treatment of choice.

Few dental schools educate their students in the care of handicapped people. Physical disabilities may prevent the disabled patient from lying down or holding their mouth open for long periods. Mental deficiencies negate logical explanation for the need to remain still. Noise and unfamiliar surroundings can also be stressful.

New concepts in the care of the handicapped are normalization and deinstitutionalization. Adults residents capable of living away from a total care system are placed in residences in the community. This growing population will be turning to the private dental professionals for care.

If you are looking for a project for 1981, offer some time to the handicapped of Canada. Your local health unit can make you aware of any long-term care facilities and the Ministry of Human Resources has a line on any homes for the mentally handicapped. I am sure both staff and residents will appreciate any time you give.

Please consider these special people - remember how lucky we are, and say, "It's my turn" . . . to help.

Margaret Kolthamme
Dip. Dent. Hyg.

Newsline

CDHA Representative Travels To England

Sharon French, our International liaison representative, attended the 8th International Symposium on Dental Hygiene in Brighton, England in July. During the symposium, the International Liaison Committee (ILC), composed of representatives from eight member countries, reviewed a draft of the Constitution and Bylaws for a proposed international association of dental hygienists. The ILC sees this proposed association as the hygiene counterpart of the Federation Dentaire Internationale (FDI) and hopes to eventually hold

some type of membership in FDI. The draft objectives of an international dental hygienists' association to be created at the 9th International Symposium in July 1983, are:

a) To promote world co-operation and co-ordination for the advancement of the science and art of oral hygiene in the interests of improved health for all people.

b) To promote optimum oral health care to serve the public need.

c) To represent and promote the progression and interest of dental hygiene on a voluntary, international, non-governmental basis.

d) To establish and maintain a voice for the profession in international dental and health related affairs.

e) To promote agreement and consensus on high standards of education, qualification, and practice of the profession.

f) To promote and co-ordinate an exchange of knowledge and information about the profession amongst its members.

In addition to attending the ILC meeting, French participated in a panel discussion, presenting the Canadian perspective on the education and role of dental hygienists in dental health education. French, who works for the Department of National Health and Welfare, also presented a table display promoting the federal government's recent publications on preventive dentistry and oral radiology, and their revised teacher's guide on dental health.

**The American
Dental Hygienists
Association
and
the Pennsylvania
Dental Hygienists
Association
invite you to attend
the Ninth
International
Symposium
on Dental Hygiene
to be held
July 10 - 13, 1983
in
Philadelphia,
Pennsylvania, USA**

Provincial Editors Learn By Doing

Editors and prospective editors representing the ten provincial dental hygiene associations met in Calgary on August 28 for a full day workshop on writing, editing, designing, and managing a provincial newsletter. The CDHA board of directors felt that the workshop was a necessary investment in our human resources since we rely so heavily on written communication to carry out our Association's business and to transmit news and information to our members. Several provincial directors to the board and committee chairmen, gathered in Calgary for the annual

board meeting, attended the morning session of the workshop which featured a hands-on approach to more effective writing. The afternoon session reviewed the basic elements of design and stressed ways in which the layout of a newsletter can entice the reader and make his or her job easier. The day ended with a discussion on ways to cut costs and manage the business side of producing a publication. Facilitators for this program were Stephanie Nagle, CDHA editor, and Marjorie Dimitri, former CDHA editor.

Editorial Section Changes Its Name

You will notice in this issue that our editorial section has a new name - "comment".

Dr. Stan Soffin, Associate Professor of Journalism at Michigan State University and Director of the American Dental Association's Dental Editors Seminar, advises that an editorial by definition, is a group's policy on a certain issue arrived at after the group has met and discussed the issue thoroughly. An editorial,

therefore, is not one person's opinion on a subject, but rather reflects the viewpoint of a group. In our case, this group would be the CDHA board of directors and, since our board only meets once a year and it is impossible to get the board's ruling on all editorial topics, the name of this section has been changed to more accurately reflect the nature of the page.

Newsline

Sources of Dental Health Education Materials

Canadian Dental Hygienists' Association,
c/o Community Dental Health Chairman,
53 Ariel Court,
Nepean, Ontario. K2H 8J1.
Dental Health Buttons and help

Canadian Dental Association,
1815 Alta Vista Drive,
Ottawa, Ontario. K1G 3Y6.
Posters, pamphlets, references
Dental Health Month materials
Price list available

American Dental Association,
211 East Chicago Ave.,
Chicago, Illinois. 60611.
Catalogue available

Health and Welfare Canada,
Information Directorate,
5th floor, Brooke-Claxton Bldg.,
Tunney's Pasture,
Ottawa, Ontario. K1A 0K9.
Dental pamphlets

Provincial Ministry of Health,
check for address in your
respective province.
posters, pamphlets on all health
related topics
(smoking, nutrition, dentistry, etc.)

National Easter Seal Society,
2023 West Ogden Ave.
Chicago, Illinois. 60612
pamphlet - Helping Handicapped Persons
Clean Their Teeth.
A.J. Nowak

Project "D",
345 East Wisconsin Avenue,
Appleton, Wisconsin. 54911.
pamphlets - i.e. Why X-Rays?

U.S. Dept. of Health, Education and Welfare,
Bureau of Health Manpower Education,
Division of Dental Health,
9000 Rochville Pike,
Bethesda, Maryland. 20014
Catalogue available

*Professional Education Products,
4116 Farnam Street,
Omaha, Nebraska. 68131.
Posters

Associated Milk Foundations of Canada,
2 Thorncliffe Park Drive, Unit 2,
Toronto, Ontario. M4H 1H2.
Nutritional teaching aides and posters

Proctor & Gamble Inc. (Crest)
Professional Services Division,
P.O. Box 355, Station A,
Toronto, Ontario. M5W 1C5.
Dental Health Kit (including brush, paste,

disclosing tablets and
'how to use' instructions.)
Activity book

Colgate - Palmolive Canada,
64 Colgate Avenue,
Toronto, Ontario. M4M 1N7.
Dental Health Kit
Booklet - Dental Care Facts

Block Drug Co. Canada Ltd.,
36 Northline Road,
Toronto, Ontario. M4B 9Z9

Cooper Laboratories Ltd., (Oral B)
670 Curé Boivin,
Boisbriand, Quebec. J7G 2A7.
Brushing and Flossing Charts

D.D.L. Healthco Ltd.,
7060 Hutchinson,
Montreal, Quebec. H3N 1Y7.
Smerf Activity Book - I Love My Teeth
(up to 12 years of age)

John O. Butler Co.,
6426 Notre Dame,
Montreal, Quebec. H4C 1V4.
Posters

The Teachers' Store,
check for address in major cities,
Central Depot - 25 Milvan Dr.,
Weston, Ont. M9L 1Z1
Trend Dental Health Bulletin
Board Cut Outs

*Charles B. Slack Inc.,
Thorofare, N.J. 08086.
Teeth for Life
Dental Health Teaching Manual
**taken from a list prepared by*
the Program of Dental Hygiene,
University of B.C.

Prepared by Mrs. Dale Scanlan,
C.D.H.A. Community Dental
Health, Chairman.

WAS THIS JOURNAL CORRECTLY ADDRESSED?

Every copy of the journal returned to us costs the Canadian Dental Hygienists' Association approximately fifty cents. If you are moving permanently, please let us know two months before changing your address. If the address label on this publication is not correct, please clip it, then paste it in the blank provided and mail this entire coupon to us, including your new address! Thank you.

Name _____
Address _____
City _____
Province _____
Postal Code _____

Mail to: Jo Gardner, CDHA Membership Chairman
1125 West 54th Avenue
Vancouver, B.C. V6P 1N3

**your
single
source...**

Butler

Toothbrushes—13 styles of G•U•M® and Dr. Bass brushes.
Floss—Shred-resistant Unwaxed, Fine Unwaxed, Bit O' Wax® and Tape.
Disclosants—Red Cote® Tablets or Liquid.

Other Preventive Aids: EEZ-THRU® Floss Threaders □ Floss Mate® Floss Handle □ Proxabrush® Handles and 4 refill sizes □ Interdental Brush □ Stimulator Handle □ Mirolite® and Plakfinder® Mirrors □ Fluorides, Trays, and Prophy Paste □ PROTECT Toothpaste for Sensitive Teeth



For more than half a century you've been able to look to Butler as your source for quality preventive "home-care" dental aids whether you dispense or recommend. Available at better drug stores everywhere.

Assessing the Oral Health Status of Rankin Inlet's Schoolchildren

Shirley C. Gelskey, Cert. D.H., B.S., M.P.H.
and Patricia G. Hando-Lowes, Dip. D.H.

A dental survey was conducted by staff from the School of Dental Hygiene, Faculty of Dentistry, University of Manitoba, to assess the needs of the schoolchildren in the remote area of Rankin Inlet, Northwest Territories. Rankin Inlet is an Inuit community located 930 miles north of Winnipeg, Manitoba.

The assessment was not designed to provide a complete dental examination for the student population, but rather to identify obvious dental pathology which would be relevant for dental health program planning for this population. Parameters studied were the presence/absence of apparent caries, the presence/absence of severe gingivitis, and the total number of surface restorations per child.

Methods and Materials

A dental survey was carried out in each classroom of the Rankin Inlet grade-school system (K-9). 176 students between the ages of five and sixteen were examined. Teachers and students were informed of the process and intent of the survey prior to its initiation. A tongue-blade with flashlight was used to examine. This method was chosen over the use of explorers, probes, and mouth mirrors because only a general estimate of the oral status was to be assessed. A more comprehensive clinical examination was to follow the screening session. The examiner who carried out the assessment was assisted by an Inuit interpreter who recorded specific oral findings for each child on a survey chart (Illustration 1).

The survey was conducted over a two-day period to ensure that a maximum number of children were seen. A second visit was made to

each classroom to examine any children who had missed the first visit.

Dental Survey Chart for Rankin Inlet Schoolchildren, February, 1980

Name _____

Age _____

Grade _____

Date _____

Oral Condition: **Check**

No apparent caries _____

1-3 apparent cavities _____

4-6 apparent cavities _____

Rampant Caries (advanced) _____

Abscess _____

Number present _____

Severe Gingivitis _____

Number of restorations present _____

In addition to the dental survey, dental health lessons were taught on the first day's visit. Each child was given a toothbrush. Proper toothbrushing technique was demonstrated and students and teachers participated in a brush-in, applying the principles of proper brushing in their own mouth.

Teachers were advised how to establish a daily toothbrushing program in their classrooms. The feasibility of initiating a fluoride mouthrinse or fluoride tablet program in conjunction with the toothbrushing regime was investigated.

Results

The results of the survey are summarized in Tables one and two.

Table one indicates that more of the children age 9-and-under presented with rampant caries than did children age 10-or-over. In total 29 children exhibited rampant caries. 45 children presented with 4-6 apparently carious lesions each. (The criteria for an apparently carious lesion was a grossly demineralized lesion for which there was no doubt upon visual examination that caries existed.) 70 children presented with 1-3 apparently carious lesions each. This level of tooth decay was distributed equally among all age groups with the 10-12 year olds exhibiting the highest frequency.

A total of 32 children had no apparent carious lesions. Few of these children were 10 years of age or older.

Table two indicates that the total number of restored tooth surfaces was 464. The majority of

these restorations (310) were found in children aged 10-14 years.

Of the 176 students examined, only four exhibited severe gingivitis based on an observation of scarlet red, bulbous tissues, but nearly all students showed some degree of gingivitis.

Discussion

The administrative and teaching staff of the Rankin Inlet School System assisted in facilitating the survey.

Following a meeting between the examiner and the principal of the school, the teachers were briefed regarding the intent and format of the survey. Each teacher introduced the examiner to the children in the classrooms. As a result of this co-operation, a large number of the student population were examined.

However, because of consistently poor school attendance, some children were not assessed during the two-day period. (Total enrolment = 290; number of students examined = 176; number of students termed by staff as absent habitually = 90).

The names of all children who indicated that they were in pain at the time of the survey were given to the dental team on site from the University of Manitoba (one dental instructor, one dental student, one dental hygiene instructor, one dental hygiene student). These children were examined and received treatment, consisting primarily of restorations and extractions. The treatment was rendered at the dental clinic in the Northwest Territories Nursing Station.

The names of children identified as having rampant caries were given to the supervising nurse at the Northwest Territories Nursing Station along with a list of children who presented with 4-6 apparent cavities. The two lists were to be used by the next dental team from the University of Manitoba to ensure that the children requiring the most immediate attention received priority.

The data (Tables 1 and 2) indicate that the younger children (age 9-and-under) presented with a higher frequency of apparently carious teeth and fewer restorations than the older children. Furthermore, a greater proportion of children aged 10-14 years presented with no apparent caries, primarily because their carious lesions had been treated and restored.

Summary and Conclusions

A dental survey was designed and conducted to determine the dental health of the school-aged population of Rankin Inlet, Northwest Territories. Parameters studied were the presence/absence of apparent caries, the presence/absence of severe gingivitis, and the total number of surface restorations per child.

Table one: Number of Schoolchildren, by age, with rampant caries, 4-6, 1-3, and no apparent caries

	AGE												No.
	5	6	7	8	9	10	11	12	13	14	15	16	
Rampant Caries*	1	5	3	7	2	0	2	3	1	4	0	1	29
4-6 Apparent Cavities*	0	4	8	3	9	4	3	6	4	1	3	0	45
1-3 Apparent Cavities	3	5	4	6	6	13	8	10	5	8	1	1	70
No Apparent Caries	1	0	2	3	2	3	5	8	2	5	1	0	32
	TOTAL												176

*Rampant caries indicates a dentition in which seven or more teeth appear to be apparently carious.

*Apparent caries indicates a grossly demineralized lesion for which there is no doubt upon visual examination that caries exists.

Table two: Number of Surface Restorations Presented By School-Aged Children of Rankin Inlet

	AGE												Total
	5	6	7	8	9	10	11	12	13	14	15	16	
Number of Surface Restorations	0	14	27	33	36	47	44	74	55	90	28	16	464

COLGATE INTRODUCES A BREAKTHROUGH IN TOOTHPASTE FORMULATION.

TWO FLUORIDES IN ONE TOOTHPASTE.

New Colgate™ is the first and only toothpaste in Canada to combine the two fluoride compounds now most widely used to provide superior caries reduction.

In New Colgate, (0.76%) sodium monofluorophosphate and (0.1%) sodium fluoride have been incorporated in a hydrated alumina base. And a 3-year clinical study conducted in England,* confirms that this combination provides superior protection when compared to a single fluoride formula with sodium monofluorophosphate (0.76%).

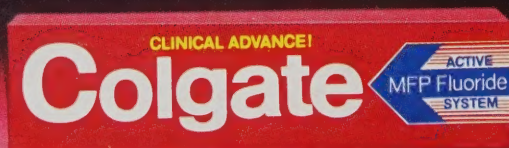
The clinical results lend support to the recommendation made by a team of experts reporting on the U.S. National Caries Program,** that different combinations of fluorides, bases, etc. should be studied "to determine the combination that is most effective in preventing caries."

In summary, the clinical trial provides evidence that Colgate's combination of fluorides gives superior caries protection. We urge you to recommend the only product that combines two fluorides in one toothpaste.

New Colgate.

*Published in the British Dental Journal, October, 1980.

**Evaluation of the National Institute of Dental Research National Caries Program. Volume 1, November, 1979, Page 56.



CLINICAL ADVANCE!

The assessment indicated that a large segment of the school population was in need of immediate dental care. Of the 176 students examined, 144 (82%) presented with apparent caries; of these, 20% had rampant caries. A significantly smaller portion of the population presented with severe gingivitis (2.2%), although nearly all children presented with some degree of mild to moderate gingivitis.

A copy of the *School Dental Survey, Rankin Inlet, Northwest Territories, Feb. 1980* report with recommendations was sent from the University of Manitoba Faculty of Dentistry to the Director of the Keewatin Zone, as well as to the Regional Dental Consultant for the Medical Services Branch, Department of National Health and Welfare, Canada.

Recommendations

The data indicate an obvious and immediate need for extensive dental treatment for all Rankin Inlet children, particularly for the younger children aged 9-and-under.

A more comprehensive approach to dental health beyond clinical dental treatment is recommended. Greater emphasis should be placed on

the prevention of dental disease. Dental health education and daily school toothbrushing sessions alone are only moderately effective in the prevention of dental caries.

The scientific literature has demonstrated conclusively that the most effective public health measure in controlling dental caries is the fluoridation of the central water supply. If community fluoridation is not feasible, a fluoride lozenge or rinse program in conjunction with brushing sessions would be a realistic alternative for these children.

The majority of teachers at Rankin Inlet were enthusiastic about carrying out daily brushing sessions, and they also seemed to appreciate the potential benefits of a school fluoride rinse or lozenge program. Establishing and maintaining such a fluoride program in the school at Rankin Inlet would require periodic supervision by dental personnel to ensure effective and efficient operation.

About the authors: Shirley Gelskey is an Associate Professor and Director of the School of Dental Hygiene, University of Manitoba. Patricia Handlowes practices hygiene in a general dental practice in Edmonton, Alberta.

Book Review

Essentials for Periodontics. Elizabeth A. Pawlak and Philip M. Hoag, editors. The C.V. Mosby Company, Saint Louis. 1980. Pages: 160; Illustrations: 191; Price: \$19.25.

This newly-published second edition of the superb classroom text maintains its original aim of presenting basic principles and discussions of the current practice of periodontics. With its many illustrations and well-presented topics, it more than adequately fills the needs of dental hygienists and dental auxiliary students. Chapters include the following: periodontal anatomy; clinical and histological characteristics; basic etiology of periodontal disease; classification of periodontal diseases; gingivitis; gingival enlargement; periodontitis; periodontal occlusal trauma; periodontosis; gingival recession; pericoronitis, gingival abscess, periodontal abscess and cysts; periodontal examination, diagnosis, prognosis and treatment planning; plaque control in periodontal therapy; basic instrumentation for scaling and root planing; and surgical periodontal procedures.

Each periodontal disease is discussed on the basis of ten key factors and is presented in an outline form: (1) definition, (2) clinical characteristics, (3) radiographic changes, (4) histopathology

and pathogenesis, (5) etiology, (6) prognosis, (7) nutritional implications, (8) treatment, (9) patient education, and (10) preventive measures. Changes in this edition reflect the current concept of the immune response in relation to periodontal disease. Expanded sections have been prepared on gingivitis in children, eruption gingivitis, juvenile periodontitis (periodontosis), gingival recession, instrument grasp and principles of scaling, periodontal dressings, infrabony periodontal pockets, and abnormal bone contours.

There are some minor criticisms. Primary and secondary herpetic gingivostomatitis should be better differentiated. A more in-depth review of aphthous lesions is required. Perhaps a chart could be incorporated to differentiate ANUG, aphthous ulcers, and acute herpetic gingivostomatitis. One typographical error occurs on page 72 (periodontal). However, this is "nit picking". It is an excellent book for learning and accomplishes what it sets out to do. Suggested readings refer the reader to other readily available texts. It should find a place in every dental hygienist's operatory.

Evie F. Jesin, Dip. Dent. Hyg., B.Sc.,
Teaching Master, Allied Health Division,
George Brown College, Toronto, Ontario.

Education

SELF-ASSESSMENT TEST

The 1981 series of Self-Assessment Tests are provided by dental hygiene educators at Dalhousie University, Halifax, Nova Scotia. The second test reviews Restorative Procedures and Materials. When you have completed the test, turn to page 72 for the correct answers.

1. Which of the following factors affect pulpal response to operative procedures?
 - a) condition of the pulp pre-operatively
 - b) contamination of the preparation area
 - c) type and manner of application of restorative materials
 - d) cutting techniques
 - e) all of the above
2. What type of material is used first when covering a small pulp exposure, as in a direct pulp capping procedure?
 - a) cavity varnish
 - b) zinc-phosphate cement
 - c) zinc-oxide and eugenol
 - d) calcium hydroxide
3. Which material(s) has a sedative effect on the pulp?
 - a) calcium hydroxide
 - b) zinc phosphate cement
 - c) zinc-oxide and eugenol cement
 - d) polycarboxylate cement
 - e) none of the above
4. Cavity varnish is:
 - a) water soluble
 - b) used under filled and unfilled resin restorations
 - c) applied between dentin and a zinc-oxide eugenol base
 - d) not applied prior to application of zinc phosphate cement.
5. Composite resin restorative materials:
 - a) have a high degree of shrinkage compared to unfilled resins
 - b) contain solid particles which contribute to its strength and hardness
 - c) contain fluoride
 - d) have a relatively long setting time
 - e) a & b
6. It is important to overfill a cavity preparation when using a composite resin material because:
 - a) this decreases porosity
 - b) it minimizes shrinkage
 - c) the exposed surface does not sufficiently polymerize
 - d) all of the above
7. In order to allow for shrinkage toward the cavity walls when using unfilled resin the following should be done:
 - a) rapidly fill the cavity preparation
 - b) apply the material in small increments
 - c) use a higher liquid - powder ratio
 - d) all of the above
 - e) none of the above
8. A significant feature of amalgam restorations which results in good clinical performance is
 - a) the presence of mercury in the material
 - b) fracture does not occur
 - c) tarnish does not occur
 - d) microleakage diminishes with time
9. The following can increase the rate of marginal deterioration of a dental amalgam restoration:
 - a) undertrituration
 - b) improper mercury/alloy ratio
 - c) heavy condensation pressure
 - d) a & b
 - e) b & c
 - f) a & c
 - g) all of the above
10. Which of the following factors can result in deterioration of polished surfaces of amalgam?
 - a) moisture contamination during placement of the amalgam
 - b) using polishing agents without coolants
 - c) polishing some areas of a restoration to a higher degree than others
 - d) a & b
 - e) b & c
 - f) all of the above
 - g) none of the above

Ms. Pauline Murphy
Dalhousie University
School of Dental Hygiene
Halifax, Nova Scotia



MEMBERSHIP

Will Dental Hygiene in Canada Survive the 1980's?

What kind of a question is that, you ask? Is the existence of our profession even being questioned? It could be in the not too distant future according to a news article in a recent issue of the *Journal of the Canadian Dental Association*.

"Dental Manpower Sparks Dialogue in the Profession" is the title of the article from which the following quote is taken: "Economists feel that dentists in the future will have to render more extensive services, including those presently provided by hygienists, and that the attitude of dentists towards the services they render themselves will have to change." This statement reflects just one of several views relating to the apparent manpower dilemma facing the dental profession today. What is the dilemma? It appears that the supply of dental care services is now almost equal to or even greater than the demand. As a result, income levels (of dentists) are tending to be static, younger dentists have been unable to build practices, and group practices with a large number of auxiliaries are not as busy as they would like to be. A variety of factors would seem to be involved: attrition in the number of patients, the inflationary spiral, increased numbers of graduate dentists and dental auxiliaries, and changes in the dental needs of the population as a result of the quality and quantity of care available.

From the hard data available, it becomes obvious that changes in the practice of dentistry as we know it today are inevitable. What part will dental hygienists play in the future of dentistry in Canada? The answer is not exactly clear. What is clear, however, is that failure to act and act now may lead to undesirable consequences.

Your membership in the CDHA is a vital commitment to an active organization striving to promote the profession of dental hygiene. We do not pretend to know all the answers but we do believe that, working together, we can maintain our identity and assure the future of our profession. Membership is no longer an extra-curricular option but is a professional obligation of the most pressing variety.

Will dental hygiene in Canada survive the 1980's? We certainly hope so. Please do your part by taking out your membership today.

MEMBERSHIP



CDHA Is Already Working For You . . .

... PROVIDING EFFECTIVE INSURANCE PROGRAMS

Since the early 1970's, the CDHA has offered a variety of insurance programs specifically designed for dental hygienists and exclusive to the members of the association. Types of programs include disability insurance, extended health care, and out-of-Canada hospital and medical benefits.

In May of 1980, the CDHA disability insurance plan carried by Mutual of Omaha was completely revamped. Subsequently, a national campaign was conducted to all member hygienists outlining the improved benefits. This resulted in three hundred and fifty new policies being written on the association's plan which, combined with one hundred and ninety-two hygienists holding policies on the old plan, shows approximately thirty per cent of the membership taking advantage of this endorsed benefit. All programs are monitored on a regular basis in an effort to continually improve benefits.

At the 1980 meeting of the board of directors in Halifax, the CDHA insurance consultant was directed to investigate the concept of professional liability insurance for the members of the association. This issue has since been discussed in every province, and the findings and recommendations will be presented for consideration at the 1981 board meeting in Calgary.

Articles on registered retirement savings plans (RRSP's) and disability insurance have been published in the CDHA journal. Future articles on areas of interest to member hygienists such as life insurance, auto and fire insurance, tax shelters, etc., will be prepared upon request.

Further information on any of the insurance programs endorsed by the CDHA can be obtained by contacting the CDHA insurance consultant or the Mutual of Omaha representative in your area.

Ron Berry, F.I.I.C.
CDHA Insurance Consultant

... MONITORING TRENDS IN DENTAL HYGIENE MANPOWER

How many dental hygienists are there in Canada? How many of them are working? In what kind of work are they employed? How many hours a week do they work? Where do they live? These are just a few of the many questions that must be answered in order to develop a

true picture of the dental hygiene manpower situation in Canada.

Why is the information important? It is important because it forms the base upon which major manpower decisions are made by the government, provincial governing bodies, and dental associations. It is imperative that we know exactly what is happening within our profession at the present time, and we must also have statistics available from different years so that we can see any changes that are taking place. This is done through questionnaires such as the one circulated by the CDHA manpower and utilization committee in the fall of 1979.

Your participation in responding to these questionnaires is most important. The better the response made, the greater the number of dental hygienists represented, and the more accurate the statistical information will be. Good response rates provide statistical data that are truly representative of our total profession. Statistics are a vital part of the development of dental hygiene in Canada. Your help in making them as accurate as possible is greatly appreciated.

Elaine Good, Chairman
CDHA Manpower and Utilization
Committee

... COMPUTERIZING CDHA RECORDS

The 1980's will see many changes in the association, one of which will be the computerization of records. Up to the present time, this monumental task has been coordinated by Jo Gardner who has gathered, maintained and distributed membership information on behalf of the association since 1968. With increased numbers of hygienists and also the type of information required, this is no longer a feasible undertaking for any individual. As a result, CDHA is implementing a computer program for hygienist records in conjunction with this year's membership campaign. We feel that this is a positive move which will relieve the national and provincial membership chairmen of time consuming record keeping tasks, and allow them more time for other innovative projects of the association.

Initially, Phase I of the computerization will provide current lists of members and non-members at the local, provincial, and national levels. It will also provide cards and receipts, and mailing labels as required. Phase II of the programming will see the development



MEMBERSHIP

of statistical data summaries on the following:

- Qualifications of graduates, e.g., diploma, certificate, degree, etc.
- Longevity of hygienists in practice (full time or part time)
- Salary by type of practice and location
- Number of hygienists in specialty practices, public health, general practice, education, administration, or other fields.
- Location of hygienists.

What will this information mean to you as an individual member? It will help in the selection of employment positions, the establishment of salary guidelines, and the provision of information for the placement chairmen and other association committees. For example, if you ever want to plan a class or a school reunion, lists or labels will be available upon request.

Computerization of records is a major step in the advancement of the CDHA. Please take a few minutes to complete the membership application form as accurately as possible. If you have any

questions, please contact your provincial membership chairman.

Ward McCance
Computer Systems Engineer

... PROMOTING DENTAL HEALTH FOR ALL CANADIANS

One of the objectives of the CDHA is to contribute toward the improvement of the health of the public. This is accomplished through a variety of activities of the association, especially those of the community dental health committee under the coordination of a national chairman and one representative from each province.

In the past, dental health month has been the main focus of this committee with the major project being the sale and distribution of dental health buttons. The scope of the community dental health committee, however, should and can be much broader. For example, some inquiries have brought to light a need for information on the development of preventive programs for private practice as well as the community.

Presently, it is difficult for the committee to address the issues of dental health planning when it is not aware of the specifics of the problems. Requests for help in developing ideas or locating items would be most welcomed for further input and/or direction. For a start, elsewhere in this journal is a list of some of the addresses where requests can be directed for dental pamphlets, posters, and other educational materials.

Another project is the development of a library of slides from which you, as a CDHA member, will be able to borrow to supplement your talks in the community or office. The slides will be mainly "preventive" oriented but can be expanded to include other topics as needed. Contributions to the slide library would be most appreciated, and should include a description of the subject matter as well as the date taken.

Join us. Together we can make a more significant contribution towards the needs of communities across the country for preventive education.

Dale Scanlan, Chairman
CDHA Community Dental Health Committee

Membership Quiz

Place an X before each benefit of membership in the Canadian and provincial dental hygiene associations.

- ☐ Quarterly scientific journal
- ☐ Continuing educational programs
- ☐ Annual national scientific session
- ☐ Provincial scientific sessions and meetings
- ☐ Insurance programs specifically for dental hygienists
- ☐ Representation in matters of professional concern and interest
- ☐ Information center and data bank
- ☐ Improved unemployment insurance benefits through legislative change
- ☐ Task force developing a mechanism for portability
- ☐ Salary and employment guidelines
- ☐ Placement services
- ☐ Liaisons with the government, dental profession and other related groups
- ☐ Provincial and local newsletters
- ☐ Association workshops
- ☐ Personal contact with others in the profession

ANSWERS

If you placed an X in every box, you are correct. These are all tangible benefits of membership in your professional associations. In addition, your membership provides you with the opportunity to fulfill your professional responsibilities. By participating in your organizations, you derive individual satisfaction while contributing to the betterment of the dental hygiene profession and the dental health of the public.

These are challenging, changing times for dental hygiene. To meet the challenge effectively, to stand up to outside pressures, and to improve and expand the practice of dental hygiene, we need a strong, unified membership. We need you. Please renew your membership today. If you are a new member to the profession, we welcome you to join with us.

Ailsa Wood, President
Ontario Dental Hygienists' Association



MEMBERSHIP

If You Choose

"If I choose to be a member, what do I get for my money?" is a question often asked at membership time. Certainly, one of the most visible personal benefits is the quarterly issue of the journal. However, if you choose to look at only this particular personal benefit, or you only look for additional personal benefits, you may overlook unseen but equally important larger benefits.

Improving dental hygiene on a national level from an information, education, and representation standpoint is a vital one. While the programming and activities to do this may be largely unseen by the individual member, it is working. We still have a profession in which to work. While costs for this type of activity are not tied directly to the number of members, the greater the number, the more effective the representation of the hygienists' viewpoint will be.

On the provincial and local levels, the same priority is operating. If you choose, there are other benefits such as the employment services,

monthly or quarterly newsletters, continuing education programs, and monthly or semi-annual sessions to meet with your peers for the exchange of ideas or problems.

If you choose, we can take your money and guess what priorities *you* may have for it, or you can provide what each of the programs needs: MEMBER INPUT. If you haven't told us and we guess wrong, it is like not voting and then complaining about who is elected.

If you choose, you can sit back and say, "Let someone else do it!" by electing not to join. But then you cannot complain about what is happening to dental hygiene in Canada or in your province. We are offering you an opportunity to be an influence in the development of the goals and activities of the associations at all levels. The choice is yours.

Jo Gardner, Chairman
CDHA Membership Committee

MEMBERSHIP CLASSIFICATIONS

- ☐ ACTIVE MEMBER *for graduate dental hygienists who are registered and/or licensed to practice in any of the Canadian provinces.*
- ☐ ASSOCIATE MEMBER *for dental hygienists residing in the Territories or outside Canada.*
- ☐ STUDENT MEMBER *for undergraduate dental hygiene students.*
- ☐ ALLIED MEMBER *for individuals who are not dental hygienists but who support the goals and objectives of the Association.*

MEMBERSHIP DUES

	ALTA	BC	MAN	NB	NFLD	NS	ON	PEI	QUE	SASK
Active Practicing Resident	\$75.00	\$75.00	\$60.00	\$55.00	\$40.00	\$75.00	\$75.00	\$50.00	\$115.00	\$10.00
Associate NWT or Outside Canada	NA	\$25.00	\$24.00	\$25.00	NA	\$25.00	NA	NA	NA	NA
Student	\$20.00	\$20.00	\$17.00	NA	NA	\$20.00	\$25.00	NA	\$25.00	NA
Allied Non-Hygienist	NA	\$25.00	\$25.00	NA	NA	NA	\$15.00	NA	NA	NA

These dues are for tri-level membership (local, provincial and national) where applicable.

INTRODUCING ... QULIX®

COLOR CODED PROBES

PQ-W

10 mm.
9 mm.
8 mm.
7 mm.
5 mm.
3 mm.
2 mm.
1 mm.

CP-11

11 mm.
8 mm.
6 mm.
3 mm.

WILL NOT CHIP ...
WILL NOT FLAKE ...
WILL NOT FADE ...
WILL NOT CATCH ...

**NOW ... ACCURACY, DURABILITY, AND CONSISTENCY
NEVER BEFORE POSSIBLE!!!**

Not a Teflon Coating—Not a Plastic Coating—Not Plated—Not Etched

Qulix® is a brand U.S.D.A. listed material. Hu-Friedy has combined this new material with a specially developed manufacturing process that brings you a new standard of excellence in color coded probes.

Hu-Friedy QULIX® ... Color Coded Probes—can be ultrasonic cleaned, autoclaved and dry heat sterilized.

Hu-Friedy exclusive process.

- 1  Precision grooved
- 2  Qulix flowed in and bonded
- 3  machined to a smooth surface

Qulix® is flowed into depressions made in the probe head. It is bonded and machined to a perfectly smooth surface. The result is a color coded probe that provides perfect accuracy and will not wear down ... chip ... flake ... fade ... or catch in Periodontal pockets, as other material and processes have in the past.

Others

-  Coated or painted
-  etched
-  grooved

Compare ... the accurate markings and smooth surface of the Hu-Friedy Qulix® Color Coded Probe against all others ... and you be the judge!



Write for our illustrated literature describing our complete selection of color probes:

Hu-Friedy IMMUNITY® STEEL INSTRUMENTS

October is cfde / fced Month

1980 contributors/donateurs

Bailey, M.	Kindersley, Saskatchewan	MacDonald, K.F.	Halifax, Nova Scotia
Bateson, N.	Regina, Saskatchewan	Majeski, N.C.	Dundas, Ontario
Beland, Y.M.	Victoria, British Columbia	Marsh, K.M.	Sarnia, Ontario
Bianchi, R.	Downsview, Ontario	Marshall, P.A.	New Liskeard, Ontario
Bice, S.D.	London, Ontario	Marshall, S.	Burlington, Ontario
Bland, M.L.	Gibson's British Columbia	McGuire, V.A.	Ottawa, Ontario
Blight, M.	Oshawa, Ontario	McLachlan, M.E.	London, Ontario
Boomhour, L.H.	Brampton, Ontario	Medal, C.	Toronto, Ontario
Boykovac, K.	Burlington, Ontario	Miller, M.E.	Winnipeg, Manitoba
Bryant, D.	Regina, Saskatchewan	Mitchell, A.	Truro, Nova Scotia
Buitenhuis, J.H.	Toronto, Ontario	Moffat McCann, M.L.	Victoria, British Columbia
Butt, G.M.	Halifax, Nova Scotia	Mosna, M.A.	Windsor, Ontario
Cancelli, C.	Burlington, Ontario	Murray, L.P.	Toronto, Ontario
Carruthers, C.		Nagle, S.L.	Windsor, Ontario
Chabot Hoculik, R.	St. Catharines, Ontario	Nicol, M.L.	Toronto, Ontario
Chu, R.C.	Salmon Arm, British Columbia	Partridge, G.E.	Orangeville, Ontario
Chutter, H.J.	Vancouver, British Columbia	Passafiume, L.M.	Markham, Ontario
Clark, M.	Toronto, Ontario	Phillips, C.	Welland, Ontario
Clarke, M.L.	Richmond Hill, Ontario	Priamo, N.L.	Toronto, Ontario
Collard, N.	Toronto, Ontario	Rees, S.M.	Hamilton, Ontario
Cooper, S.J.	Kitchener, Ontario	Rideout, L.A.	Oshawa, Ontario
Craig, B.J.	Vancouver, British Columbia	Robertson, P.D.	North Vancouver, British Columbia
Denure, P.A.	Port Perry, Ontario	Rowan, N.	Orton, Ontario
De Pelham, C.	Toronto, Ontario	Sargent, G.E.	Thunder Bay, Ontario
Dickson, M.	Toronto, Ontario	Scoles, D.C.	Montreal, Quebec
Dimitri, M.J.	North Vancouver, British Columbia	Sipko, K.E.	Richmond, British Columbia
Dinneen, J.A.	Whitby, Ontario	Smith, B.J.	Mississauga, Ontario
Donovan, H.L.	Buena Park, California	Smorang, J.	Los Angeles, California
Duncanson, V.M.	Calgary, Alberta	Staiman, P.	Willowdale, Ontario
Dunker, P.M.	Plattsville, Ontario	Stradiotti, E.	Vancouver, British Columbia
Epple, C.		Strevens, L.D.	Scarborough, Ontario
Falconer, C.	Woodstock, Ontario	Sturmwind, D.M.	Victoria, British Columbia
Feller, S.J.	Stonewall, Manitoba	Terakawa, N.	Scarborough, Ontario
Feres Patry, K.	Kanata, Ontario	Thom, M.L.L.	Russell, Ontario
Forgay, M.G.E.	Winnipeg, Manitoba	Thorp, G.	North Vancouver, British Columbia
French, S.B.	Ottawa, Ontario	Van Der Haegen, C.A.	Victoria, British Columbia
Frolek, L.	Vancouver, British Columbia	Voris, J.S.	Vancouver, British Columbia
Frosina, C.	Hamilton, Ontario	Wainberg, K.	Willowdale, Ontario
Gardner, W.J.	Vancouver, British Columbia	Watts, L.M.	Calgary, Alberta
Gibb, B.	Kitchener, Ontario	Webb, C.	Burnaby, British Columbia
Girardin, D.	La Salle, Manitoba	Williams, A.C.	Hamilton, Ontario
Good, E.	Kitchener, Ontario	Willms, S.	Heidelberg, Ontario
Grant, D.M.	London, Ontario	Wilson, M.D.	Thunder Bay, Ontario
Halowski, W.A.	Vancouver, British Columbia	Wood, A.E.	Toronto, Ontario
Harwood, N.E.	Vernon, British Columbia	Worobey, C.L.	Winnipeg, Manitoba
Hewton, B.I.	West Vancouver, British Columbia	Wylie, K.N.	Ottawa, Ontario
Hirtle, L.	Salmon Arm, British Columbia	Yeo, C.	Stoney Creek, Ontario
Holetich, J.	Hamilton, Ontario		
Holmes, L.J.	Lindsay, Ontario		
Holmes, R.	Kamloops, British Columbia		
Horton, L.N.	Bramalea, Ontario		
Hubbard, F.M.	Vancouver, British Columbia		
Jugovich, S.A.M.	Mississauga, Ontario		
Killips, C.J.	Edmonton, Alberta		
Kline, C.	Vancouver, British Columbia		
Kolthammer, M.A.	Kamloops, British Columbia		
Krievins, T.	Weston, Ontario		
LaFleur, R.E.	Carrying Place, Ontario		
Lett, D.	Etobicoke, Ontario		
Louann, F.	Vancouver, British Columbia		

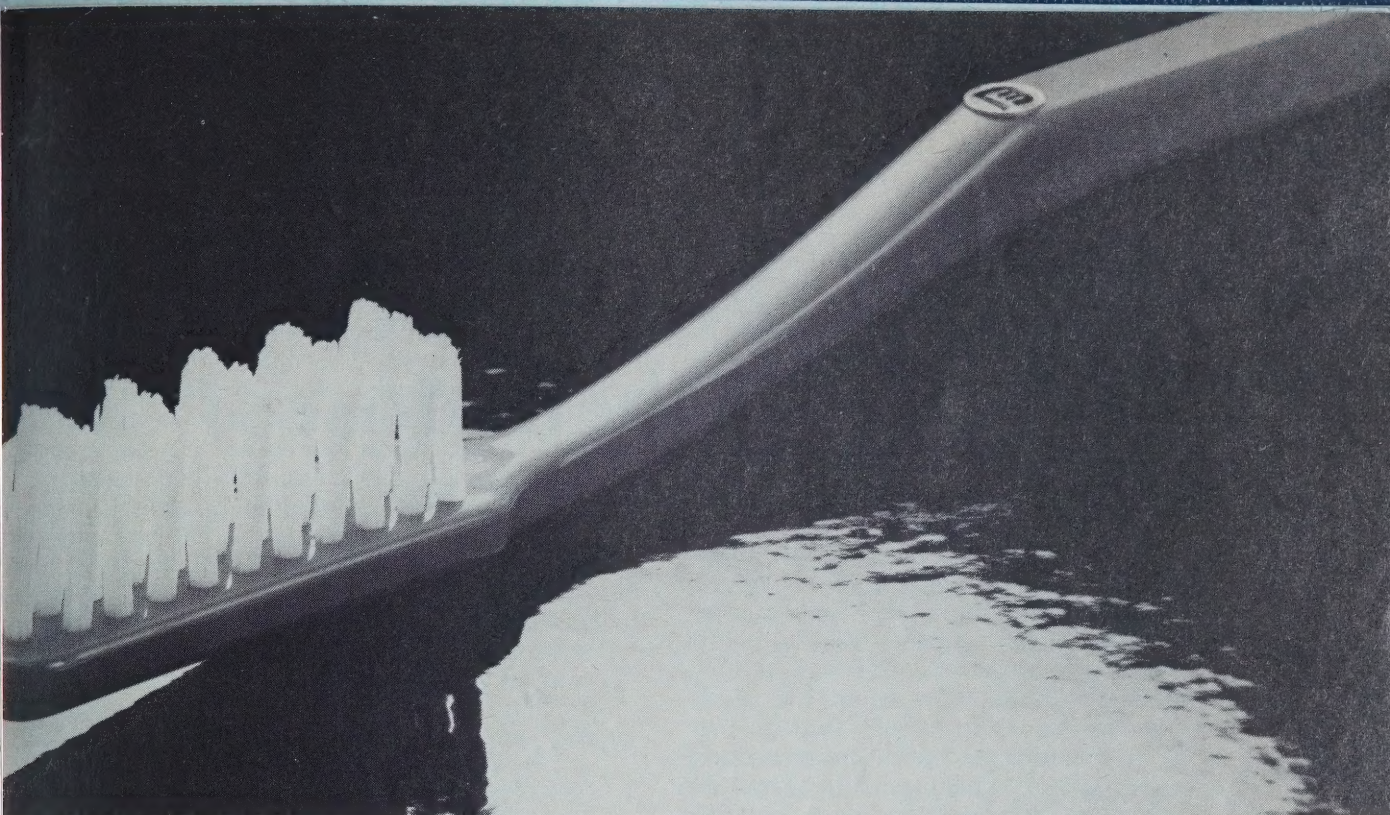
Sustaining Members/Membres de Soutien (\$2,000 - \$3,499)

- Canadian Dental Hygienists' Association

Subscribers/Adhérents \$100 - \$499

- British Columbia Dental Hygienists' Association
- Greater Vancouver and District Dental Hygiene Society
- Ontario Dental Hygienists' Association

- Contributor for 10 years or more
Donateur depuis 10 ans ou plus



Four recent studies* into relative toothbrush efficacy have proven the same thing. Jordan brushes best.

The Jordan V Soft. The Jordan V-tufted soft-bristle toothbrush was found to be the most efficient of all brushes tested in terms of plaque removal, particularly in interproximal margins.

V-Tufted Brushes. V-tufted toothbrushes were found to

remove plaque more effectively than straight-cut multitufted toothbrush designs.

Soft Bristles. Soft-bristle brushes remove plaque better than firmer textures, particularly when vertical brushing motions are used.

Time Spent Brushing. Not surprisingly, plaque removal was found to increase with time spent brushing.

Brushing Pressure. Also confirmed was that plaque removal is significantly enhanced with increased pressure of brushing.

Jordan

Designed to reach
where other brushes can't.

*Yankell, S.L., U Pa Sch Dent Med, Phila, Penn IADR Journal of Dental Research, Jan 79, Vol. 58, P. 239, Abstr 585
Nygaard-Østby, P., et al, Jordan as Oslo, Norway; U Pa Sch Dent Med, Phila, Penn.
Bergenholtz, A., Dept Periodont, U Umea, Umea, Sweden.
Yankell, S.L. et al, U Pa Sch Dent Med, Phila, Penn.

FOR FURTHER INFORMATION, OR TO ORDER PROFESSIONAL SUPPLIES, WRITE TO: "THE JORDAN TOOTHBRUSH" CO. P.O. BOX 100, BOY

HORNER

What Do You Know About Lupus Erythematosus?

Addie Gutzmann, Dip. Dent. Hyg.

A thirty-year-old woman walks into your operatory with a few red papules on her facial skin and a rash across her cheeks and nose. She looks tired and pale. She may be suffering from a variety of disorders: lack of sleep; overexposure to sunlight; an allergic reaction; psoriasis; lichen planus; pemphigus vulgaris; or she may have some form of a skin disease called lupus erythematosus.

Lupus occurs in two forms:

- i) Chronic discoid type
- ii) Acute systemic type

It is most critical to differentiate the systemic form of lupus erythematosus from chronic discoid lupus erythematosus. The former is a potentially fatal disease with multiple manifestations, while the latter is principally of cosmetic importance.¹

Chronic Discoid Characteristics

Chronic discoid lupus is a skin disease without systemic manifestations. The slowly spreading, well-defined lesions occur as erythematous scalings on the face and neck. The characteristic facial rash in a butterfly pattern across the nose and cheeks is often the first sign of the disease and is most prominent after exposure to sunlight. Skin lesions begin as sharply delineated reddish papules with fine white or yellowish scales. Mature lesions are elevated, erythematous, and edematous with an irregular border. The center atrophies, fades, and may scar, while the periphery remains erythematous. Similar eruptions may occur on other parts of the body such as the chest, back, extremities, and oral mucous membranes. There may also be oral lesions, which will be described later.

This form of the disease affects both sexes equally at any age, but most often in the third or fourth decade. It is rarely fatal.

Systemic Lupus Characteristics

The patient with systemic lupus erythematosus, the relatively rare form of the disease, usually has a variety of abnormalities including fatigue, malaise, arthralgia (painful joints), anemia, facial rash associated with photosensitivity, and weight loss. Renal involvement occurs in 40 to 50 per cent of patients.² The musculoarticular manifestations, such as arthritis and arthralgia, occur in almost all patients during the course of the illness. One-half of patients afflicted also have cardiac abnormalities: myocarditis; pericarditis; or a nonbacterial verrucous endocarditis (Libman-Sacks disease). Neuro-psychiatric involvement, convulsive disorders, psychosis, emotional instability or organic brain syndrome may also be found.²

The disease usually occurs during the second and third decade of life. 90 percent of systemic lupus patients are women and the incidence is reported to increase when the endocrine system is disturbed or with the use of oral contraceptives.²

The etiology of lupus erythematosus is still unknown, but it is widely believed to be autoimmune related (tissue injury caused by an apparent immunologic reaction of the host to his or her own tissues). Recently several theories have been formulated for the etiology:²

- (1) An autoimmune disease (although doubts exist whether auto-antibodies cause major lesions).
- (2) Allergic reaction to infection (no allergen has yet been demonstrated).
- (3) Hormonal factor based on the fact that cortisone therapy results in improvement.

A genetic predisposition has been suggested on the basis of clinical and laboratory abnormalities which have been found in relatives of patients with systemic lupus erythematosus.³

Oral Symptoms

Oral symptoms in lupic disease have been rarely described. They are often not painful and do not attract the attention of the patient, even if there are ulcers. Their existence can be observed during or between fevers in the form of erosion, particularly on the palate, but also in the cheeks and lips. There is spontaneous development of keratosis and atrophy, and the lesions disappear with treatment.⁴ Inflammatory periodontal disease in response to bacterial plaque must also be considered, since the response may be modified by systemic factors in systemic lupus erythematosus.

If oral manifestations are present, they are usually more severe in the chronic discoid form. Oral lesions of chronic discoid lupus erythematosus occur in 25 percent of the cases;⁵ the most frequent areas being on the tongue, palate, buccal and labial mucosa, gingiva, and vermillion border of the lips. They may occur without involvement of the skin or before skin lesions occur. The most common symptom is a burning sensation from hot and spicy foods, but there may also be soreness and discomfort from toothbrushing. These lesions vary in appearance in that they may be elevated, plaque-like white keratotic lesions or erosive lesions, either of which may be surrounded by a broad erythematous zone which extends into adjacent tissue. They may also be ulcerated with white borders and fine white striae radiating from the center, which is typical of discoid lupus, or the lesions may have an elevated border and a central scaly area.

Oral lesions associated with the chronic discoid type remain situated in the same site for about four years; the lesions situated on the vermillion border of the lips can persist for as long as eight years. Eventually the lesions heal by scar formation. Histologically, oral discoid lupus erythematosus may closely resemble lichen planus, which must be considered during diagnosis.

In systemic lupus, approximately 15 to 20 percent of the cases have oral lesions. The lesions vary widely and may look like those of other diseases. They can be found on the lips and oral mucous membranes. Lesions on the lips usually have a central atrophic area with small white dots. The area is encircled by a keratinized border of white striae. Mucous lesions have central depressed atrophic areas which are surrounded by a raised keratotic zone which tapers off into small white lines.

Gingival lesions may also be frequent but are easily overlooked. When present, the gingival le-

sions range from erythematous, edematous areas with superficial erosions to large ulcers.⁶ Pigmentation of the oral mucosa may also occur.

A final locus to consider for oral manifestations is the salivary glands. There can be chronic inflammation, painful enlargement, atrophy, occlusion of ducts and eventual xerostomia.⁴

Diagnosis and Management

Diagnosis of lupus erythematosus is usually based on clinical findings and histologic patterns. It is generally believed to depend on two organ systems and a positive lupus erythematosus test. Hargraves and associates used a specific systemic lupus erythematosus test called "Lupus erythematosus cell inclusion phenomenon" which shows positive in 85 per cent of patients with systemic lupus.² Lab tests frequently show the presence of a number of antinuclear antibodies, and 10 to 20 per cent of lupus patients also show a positive test for rheumatoid factor.²

Diagnosis of lupus erythematosus is almost impossible to make in the absence of skin lesions, but should never be made on skin or oral lesions alone.

A complete history, physical examination, additional lab data and a biopsy of lesions is necessary to establish a definite diagnosis.

It has recently been estimated that more than 75 per cent of patients with systemic lupus erythematosus have a five year survival rate.² Patients may die of renal failure, degeneration of the central nervous system, or recurrent bacterial infections, since there is a decreased ability for the body to fight infection with systemic lupus.

There is no cure for lupus erythematosus. When the symptoms are severe, cortico-steroids are given, but these systemic steroids cause other complications, such as delayed healing by inhibiting proliferation of fibroblast and epithelial cells.² Steroids inhibit the inflammatory response of the body by suppressing the permeability of small blood vessels during inflammation, thereby retarding the migration of polymorphonuclear leukocytes and circulating antibodies into the area of injury.⁶ Immunosuppressive drugs have been effective in some patients as the primary therapy, and symptoms of arthritis and arthralgia have known to respond to salicylates and rest. To treat oral lesions, topical steroid therapy has been used satisfactorily. To prevent aggravation of skin lesions, it has been suggested that the patient avoid sunlight.

Dental Care Considerations

For correct dental management of a patient with systemic lupus, one must be familiar with the dis-

ease process and the medications used for treatment. It is essential to take a complete medical/dental history. Be aware of drugs used and their physiologic effects. The patient's physician should be consulted before any dental treatment is undertaken. Patients with systemic lupus frequently have a severely deficient platelet count; therefore, care should be taken in dental procedures which are likely to cause hemorrhage. After completion of therapy, patients should be monitored clinically and radiographically. Trauma of dental procedures may contribute to the disease; therefore, patients healing process should also be monitored closely. It must be remembered that steroids may mask signs of infection.

Nasal congestion causing patients to breathe through their mouths, salivary gland breakdown, and duct occlusion are sometimes overlooked in patients with lupus erythematosus, but these conditions produce an environment which makes oral hygiene difficult and the maintenance of the oral cavity an important consideration.

Even though the physician has responsibilities to diagnose and treat this disease, it is important for dental hygienists to be aware of this disease and know its signs and symptoms, because they may be the first to notice the changes associated with this condition during routine hygiene treatment. When unusual oral changes without obvious local causes become apparent, it is the hygienist's responsibility to promptly draw this to the dentist's attention, so that the patient's physician may be alerted. Early treatment increases the changes of a favourable prognosis.

About the author: Addie Gutzmann wrote this article while she was a hygiene student at the University of Manitoba. She is now employed full-time as a hygienist in a general practice in Winnipeg, Manitoba.

References

1. Shklar, G. and McCarthy, P. The Oral Manifestations of Systemic Disease. London: Butterworths. p. 110, 1976.
2. Samuelson, S.J. Friedlander, A.H. Swerdloff, M., Systemic Lupus Erythematosus. The Journal of the American Dental Association. 100:553-557, 1980.
3. Vallois, H. Debieu, J. Merchak, M. Commissionat, Y. Lupus Disease and its Buccal Symptoms. Actualities Odontostomatologiques. 32:513-437, 1978.
4. Barr, Dr. E. Byrd. Balciunas, Dr. B. Antonia. Lupus Erythematosus: Report Case. Indiana Dental Association Journal. 58:26-28, 1979.
5. Vogel, Richard J. Periodontal Disease Associated with Amegakaryocytic Thrombocytopenia in Systemic Lupus Erythematosus. Journal of Periodontology. 52:20-23, 1981.
6. Martin, Donald W. D.D.S. Lupus Erythematosus - Its Oral Manifestations Oral Surgery Oral Medicine Oral Pathology. 29:846-848, 1978.

CFDE's proud record of help 1963 - 1980

l'imposant inventaire des contributions versées par le FCED

Teacher Training Fellowships for Dentists Bourses de formation en enseignement pour les dentistes	\$ 621,055	46%
Unrestricted Grants to Dental Schools Subventions générales aux écoles dentaires	\$ 159,000	12%
Research, Teaching and Preventive Dentistry Conferences Conférences de la recherche, sur l'enseignement et de médecine dentaire préventive	\$ 132,338	10%
Dental Students' Conferences, Table Clinic Programs and Scholarships Conférences, cliniques sur table et bourses destinées aux étudiants dentaires	\$ 100,854	7%
Special Research Project at the University of Toronto (funded by a Hospital for Sick Children Foundation Grant) Projet de recherche à l'Université de Toronto (financé par une subvention de la Foundation de l'Hôpital pour les enfants malades)	\$ 93,250	7%
Teacher Training Fellowships, Scholarships, Workshops and Conferences for Dental Auxiliaries Bourses et subventions, ateliers et congrès pour les auxiliaires dentaires	\$ 78,409	6%
Graduate and Undergraduate Accreditation Surveys Enquêtes relatives à l'agrément des étudiants et des diplômés	\$ 74,000	5%
Lorne E. MacLachlan Endowment — Teacher Training Awards Donation Lorne E. MacLachlan — Bourses pour la formation d'enseignants	\$ 44,270	3%
Dental Library Survey and Other ACFD Projects Etude relative aux bibliothèques dentaires et autres projets de l'AFDC	\$ 27,700	2%
Sundry Awards Octrois divers	\$ 27,034	2%
TOTAL	\$1,357,910	100%

Alternative: Providing Preventive Services for Native People of Canada

Sandra Hemming, Dip. Dent. Hyg.

□□□
Working with the Dental Services Division gave me constant variety and an element of adventure. Several times I had to change spark plugs on a snowmobile, and on one memorable occasion, I escorted a baby by plane back to the reserve.

□□□

The Dental Services Division of Medical Services, Manitoba Region is a branch of Health and Welfare Canada. It is a Federal Government Agency providing dental care to Treaty Indians of the province of Manitoba.

My first experience with the department was as a dental assistant employed for the summer months during my dental hygiene studies at the University of Manitoba. Upon graduation in 1977, I applied and was accepted by the Division for the position of dental hygienist.

My duties combined clinical practice with public health activities in a preventive program which was based in the schools. All clinics were co-ordinated through the regional office by the regional director and staff.

Restorative, preventive, and prosthetic services were provided in mobile clinics by teams consisting of combinations of dentists, dental therapists or dental nurses, hygienists, and assistants. These

clinics were set up for two to three weeks on an Indian reserve. If the reserve was only accessible by air, dental teams were transported with all necessary equipment by truck or small plane from Winnipeg. Living accommodations, such as perhaps a three-bedroom trailer, were provided by the nursing stations in isolated areas. The dental teams were responsible for their own food preparation. In areas accessible by road, dental teams stayed at hotels or motels and food allowances were provided, since meals were eaten in restaurants.

Upon arrival in each area, team members would meet with the nurse-in-charge, principal and teachers of the school, chief and council members, and community health representatives. The program would be introduced and schedules arranged. Equipment would be set up in a location with easy access to the school and water supply, generally in the school health room.

The program for the schools included a DMFT survey of all students once a year. This study provided information for the regional office and for immediate clinical use. A World Health Organization Survey was done on a selected group of six, nine, twelve, and sixteen-year-olds over a three year period. Results are to be used for health education, quality control, identifying high risk children, program planning and evaluation.

Prophylaxis and fluoride treatments were given to kindergarten classes and grades one, two, five, and six bi-annually to protect newly erupted teeth. Grade three and four students brushed with acidulated phosphate fluoride gel in small, well-supervised groups. This method of administering fluoride was found to be very time/cost efficient.

Students in upper grades could make visits after school. In addition to protecting teeth with fluoride, fissure sealants were placed where necessary.

Dental health lessons and brush-ins were done in each grade once a year to initiate daily classroom brush-ins. Teachers were extremely responsive to the program and continued it throughout the school year. Flossing was introduced at the grade five level. Counselling about careers in the dental field was a part of the grades nine and twelve classroom presentations. The dental personnel could be consulted for teachers' projects.

Clerical work included compiling statistics or completing medical history lists and distributing dental treatment consent forms. Water samples for fluoride level testing were taken from each reserve.

A pre-natal pamphlet was given to each nursing station as reference for their classes. On some occasions, the dental team would become directly involved in such classes. I had the opportunity to be included in a weight control group, a science fair, a hospital health day, and a career day.

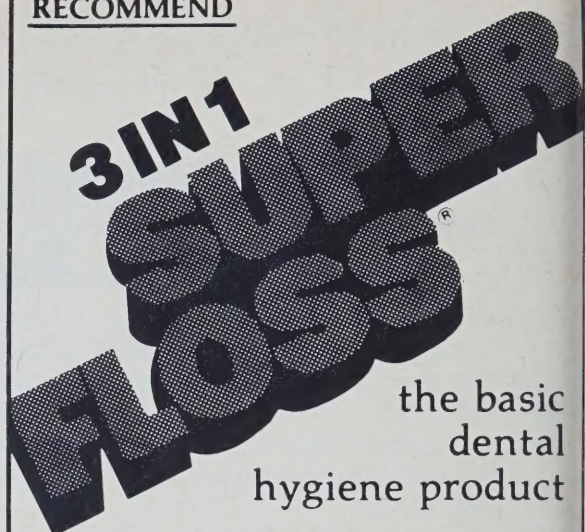
Monthly meetings were scheduled for program planning and evaluation. Throughout the year, conferences were held as part of our continuing education program. During the summer months, new projects were initiated, audio-visual materials were compiled, and preventive supplies were restocked.

Working with the Dental Services Division gave me constant variety and an element of adventure. Several times I had to change spark plugs on a snowmobile, and on one memorable occasion, I escorted a baby from its foster home back to the reserve by plane. I found that a flexible disposition was necessary. Water problems, heating and electrical disruptions, and food shortages had to be contended with. Conveniences such as television were unknown in the more isolated locations. Entertainment had to be created. Group gatherings were a common social event. I met a variety of people of diverse professional and cultural backgrounds which made for interesting evening discussions. Northern Manitoba is an outdoor enthusiast's paradise. Snowmobiling, cross country skiing, photography, hiking, boating, canoeing, and fishing were some of the enjoyable pastimes.

During my two-and-a-half years with the Division, I gained a deep appreciation of nature. One of my most pleasant memories is of walking in the crisp, cold night air and seeing the northern lights dancing, changing, and spreading across the skies.

I am grateful for the opportunity of having worked for the Medical Services Branch and I still hold a special appreciation for the people with whom I have worked.

RECOMMEND



THREADER

FILAMENT BRUSH

UNWAXED FLOSS

SUPER FLOSS provides both a floss and a special filament brush for removal and clearance of plaque and food debris from interproximal spaces. Removal and clearance of plaque and food debris are the complementary elements of maximum efficacy.

**Now clinically proven
superior to regular
dental floss by leading
American and
European University —
Dental Schools**

The SUPER FLOSS filament brush is constructed of 204 tiny nylon filament "springs". These filament springs become straight and parallel with either elongation or lateral forces. The result is a brush that can compress down to the diameter of the floss section in order to clear out smaller interproximal spaces. The filament springs automatically revert to a coiled state when relaxed. The result is a brush with a "memory" characteristic and allows for repeat usage and good durability.

PROFESSIONAL PRICE LIST

Patient Pack - \$119.00 - 144 instruction printed poly bags of 30 cleaners each (4320 cleaners)

Pro-Pack - \$21.95 - 2 poly bags of 500 cleaners each.

Now available at drug stores. Patients can order directly by mail.



marpo-dent products

10569 - 111 Street,
Edmonton, Alberta. T5H 3E8
Phone (403) 426-3720

Directory 1981 - 1982

EXECUTIVE COUNCIL:

PRESIDENT: Patricia Grant, 3 Linden Lane, Halifax, Nova Scotia B3H 1N1. Res. (902-477-9876) Bus. (902-453-4761).

PRESIDENT ELECT: Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ontario L4W 2B7. Res. (416-624-3495).

FIRST VICE-PRESIDENT: Mary Pelletier, Box 18, Site 5, R.R. 3, Moncton, New Brunswick E1C 8Z4. Res. (506-384-8728).

SECRETARY: Peggy Larder, 6150 Regina Terrace, Halifax, Nova Scotia B3H 1N5. Res. (902-429-4166) Bus. (902-424-2279).

TREASURER: Debbie Mitton, 943 Chandler Drive, Lower Sackville, Nova Scotia B4C 3C6. Res. (902-865-5626). Bus. (902-429-0479).

IMMEDIATE PAST PRESIDENT: Margaret Bailey, Box 2228, Kindersley, Saskatchewan S0L 1S0. Res. (306-463-2397). Bus. (306-463-4661).

HE BOARD OF DIRECTORS:

BRITISH COLUMBIA: Yvonne Smith, R.R. 3, Gartley Point Road, Courtenay, B.C. V9N 5M8. (604-338-6470); Marie Goldfinch, 46274 Princess Ave. East, Chilliwack, B.C. V2P 2A9 (604-792-3156); Sue Sumi, 7077 - 18th Ave., Burnaby, B.C. V3N 1G9 (604-521-5184); Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).

ALBERTA: Laura Mowat, 11424-161 Avenue, Edmonton, Alberta T5X 2L1. (403-456-0977); Winnifred MacDonald, 72 Colleen Cres., S.W., Calgary, Alta. T2V 2R3 (403-253-6178).

SASKATCHEWAN: Barbara Ferris, 5107-222 Fairmont Drive, Saskatoon, Saskatchewan S7M 4P5 (306-382-3348).

MANITOBA: Gladys Stewart, 454 Niagara St., Winnipeg, Man. R3N 0V5. (204-453-1574).

ONTARIO: Judy Barnes, 74 Keewatin Avenue, Toronto, Ontario M4P 1Z8. (416-481-7507); Linda McCance, 5027 Wixon Street, Clairmont, Ontario OH 150. (416-649-2056); Ailsa Wood, 505-160 Balmoral Avenue, Toronto, Ontario M4V 1J7. (416-923-1669); Rosemary Arsenault, 92-B McDougall Rd., Waterloo, Ontario N2L 5C5. (519-884-4216); Dale Scanlan, 53 Ariel Court, Nepean, Ont. K2H 8J1 (613-828-7962); Linda Perron, 712-101 Governor's Road, Dundas, Ontario L9H 6L7. (416-627-7193).

QUEBEC: Lucie Billette-Raychat, 4641 Cumberland Street, Montreal, Quebec H4H 2L5.

NEW BRUNSWICK: Trudy McAvity, Box 947, Rothesay, N.B. E0G 2W0 (506-847-5502).

NOVA SCOTIA: Peggy Larder, 6150 Regina Terrace, Halifax, N.S. B3H 1N5 (902-429-4166).

PRINCE EDWARD ISLAND: Jean MacLean, 6 Newland Crescent, Charlottetown, P.E.I. C1A 4H5 (902-894-3294).

NEWFOUNDLAND: Ingrid Curtis, 67 Roche Street, St. John's Nfld. A1B 1L9 (709-722-1603).

PECIAL COMMITTEE CHAIRMEN:

CONTINUING EDUCATION: Marnie Forgay, 780 Bannatyne Ave., Winnipeg, Manitoba R3E 0W3 (204-786-3683).

EDUCATION: Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4 (204-889-4890).

FINANCE: Debbie Mitton, 188 Dunbrack St., Halifax, N.S. B3M 3L8 (902-443-2837).

STUDENT MEMBERSHIP: Cara Tax, 883 Campbell Street, Winnipeg, Manitoba R2Y 1C1 (204-889-6372).

POIINTIVE OFFICERS:

EXECUTIVE SECRETARY: Judy Dickey, 46 James St., Aylmer, Quebec J9H 4S6. (819-684-9102).

EDITOR: Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2 519-254-6624).

BOOKKEEPER: Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (416-923-1669).

EXECUTIVE APPOINTMENTS:

SPEAKER FOR THE BOARD: Ms. Joanne Clovis, #1-14310-80 Street, Edmonton, Alberta T5C 1L6. (403-476-6596).

CONVENTION CHAIRMAN: 1982: Maureen Donoghue, 1904-57 Charles St. West, Toronto, Ont. M5S 2X1. (416-925-7506).

A.C.F.D. DENTAL HYGIENE SECTION: Kate Mac-

Donald, 3914 Novalea St., Halifax, N.S. B3K 3G7 (902-445-8868).

• **DENTAL AUXILIARY LIAISON OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Saskatchewan S4T 1L6. (306-569-1603).

• **INTERNATIONAL LIAISON CHAIRMAN:** Sharon French, 39 Chinook Cres., Nepean, Ontario K2H 7C9. (613-820-1196).

• **DATA BANK REPRESENTATIVE:** Pat Johnson, Oak Deane, R.R. No. 2, Aurora, Ontario L4G 3C8. (416-727-1433).

• **CDA COUNCIL ON HEALTH CARE:** Kate MacDonald, 3914 Novalea St., Halifax, N.S. B3K 3G7. (902-445-8868).

• **CDA COUNCIL ON EDUCATION:** Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4. (204-889-4890).

• **CSA TECHNICAL COMMITTEE ON DENTISTRY:** Anne Bosy, 1529 Ballyclare Drive, Mississauga, Ontario L5C 1J4. (416-270-4019).

• **OFFICER OF CDHA ORGANIZATION AND PROCEDURE:** Marjorie Dimitri, 1606 Ayleslynn Drive, North Vancouver, B.C. V7J 2T3. (604-987-7392).

STANDING COMMITTEES:

MEMBERSHIP:

• **CHAIRMAN:** Jo Gardner, 1125 West 54th Ave., Vancouver, V6P 1N3. (604-261-8642).

• **B.C.:** Cassada Parsons, 1049 West Keith Rd., North Vancouver, B.C. V7P 1Y6. (604-986-4620).

• **Alta.:** Linda Ewanovich, 128 Glenpatrick Dr., S.W., Calgary, Alta. T3E 4L6. (403-242-3465).

• **Sask.:** Darlene Armstrong, 43-35 Centennial St., Regina, Saskatchewan S4S 6P8. (306-586-9457).

• **Man.:** Darlene Armstrong, 43-35 Centennial St., Regina, Sask. S4S 6P8.

• **Ont.:** Kathleen Feres-Patry, 10C Stonehill Crt., Kanata, Ont. K2M 1G2. (613-592-5934).

• **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-3743).

• **N.B.:** Jean McGinis, 112 Marianne Dr., Rothesay, N.B. E0G 2W0. (506-849-2240).

• **N.S.:** Diane Dobson, Chester, Nova Scotia.

• **P.E.I.:** Florence Wall, Mt. Herbert, R.R. 5, Charlottetown, P.E.I. C1A 7J8. (902-569-2079).

• **Nfld.:** Coleen Thomey, 257 Lemarchant Rd., St. John's, Nfld.

MANPOWER AND UTILIZATION:

• **CHAIRMAN:** Jenny Thomas, 2759 Salina Street, Ottawa, Ont. K2B 6P8. (613-820-0405).

• **B.C.:** Randy McIlraith, 1201-2015 Nelson St., Vancouver, B.C. V6G 1N6.

• **Alta.:** Ila Seabrook, 54 Woodlake Cres., Sherwood Park, Alta. (403-467-1730).

• **Sask.:** Bev Upton, 143 Bothwell Cres., Regina, Sask. S4R 5Y7. (206-545-7563).

• **Man.:** Ruth Konzelman, 105 Olivier Ave., Selkirk, Man. R1A 0C4. (204-482-6112).

• **Ont.:** Jenny Thomas, 2759 Salina Street, Ottawa, Ontario K2B 6P8. (613-820-0405).

• **Que.:** Lucie Billette - Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5. (514-486-3743).

• **N.B.:** Sharyn Milroy, 85 Oakmore Terr., Moncton, N.B. E1G 1T4. (506-384-1961).

• **N.S.:** Linda Zambolin, 114 Regal Rd., Dartmouth, N.S. B2W 4H8. (902-434-8983).

• **P.E.I.:** Heather Keith, 4 Belvedere Ave., Charlottetown, P.E.I. C1A 6A8. (902-892-9361).

• **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's, Nfld. A1B 1L9. (709-722-1603).

COMMUNITY DENTAL HEALTH:

• **CHAIRMAN:** Dale Scanlan, 53 Ariel Court, Nepean, Ontario K2H 8J1. (613-828-7962).

• **B.C.:** Karen Fawley, 305-252 W. 2nd St., North Vancouver, B.C. V7M 1C8. (604-980-3762).

• **Alta.:** Joanne Clovis, 1-14310 80 St., Edmonton, Alberta T5C 1L6. (403-476-6596).

• **Sask.:** Maureen Bowerman, 51 Huron Place, Saskatoon, Sask. S7K 4E8. (306-664-3087); Sharon McLean, 1400 Argyle St., Regina, Sask. S4T 3S1. (306-525-3289).

• **Man.:** Margaret Geisbrecht, 20 Ruby St., Winnipeg, Man. R3G 2C8. (204-772-5010).

• **Ont.:** Cheryl Barrett, 238 Hodgson Dr., Newmarket, Ont. L3Y 1E2. (416-895-8440).

• **Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1. (514-352-6245).

• **N.B.:** Barbara Ash, Dept. of Health, P.O. Box 93, St. John, N.B. E2L 3X1. (506-658-2531).

• **N.S.:** Sandra Burrell, 6281 Duncan St., Halifax, N.S. B3H 2Y8. (902-429-1888).

• **P.I.E.:** Pat Stewart, Travellers Rest, Summerside, P.E.I. (902-366-2709).

• **Nfld.:** Lois Bowden, 189 LeMarchant Rd., St. John's, Nfld. A1C 2H5. (709-579-3259).

NOMINATIONS:

• **CHAIRMAN:** Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ont. L4W 2B7. (417-624-3495).

• **B.C.:** Evelyn McNee, 1509 Lynn Valley Rd., North Vancouver, B.C. V7J 2V1. (604-987-2821).

• **Sask:** Barb Long, 2741 Preston Ave., Saskatoon, Sask. S7G 3G2. (306-373-7434).

• **Man.:** Kim Harrot, 658 Government Ave., Winnipeg, Man. R2K 1X2. (514-667-0831).

• **Ont.:** Dale Scanlan, 53 Ariel Crt., Nepean, Ont. K2H 8J1. (613-828-7962).

• **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5. (514-486-3743).

• **N.B.:** Pam Mosher, 1064 Salisbury Rd., Moncton, N.B. E1E 3V6. (506-855-2815).

• **N.S.:** Yolanda Bresolin, 16½ Roche St., Truro, N.S. B2N 3W1.

• **P.E.I.:** Jean MacLean, 6 Newland Cres., Charlottetown, P.E.I. C1A 4H5. (902-894-3294).

• **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9. (709-722-1603).

CONSTITUTION:

• **Chairman:** Mary Pelletier, Box 18, Site 5, R.R. 3, Moncton, New Brunswick E1C 8Z4 Res. (416-624-3495).

• **B.C.:** Yvonne Smith, R.R. 3, Gartley Point Road, Courtenay, B.C. V9N 5M8 (604-338-6470).

• **Alta.:** Marg Wilson, 8739-67 Ave., Edmonton, Alta. T6J 0E3 (403-434-0925).

• **Sask.:** Joan Foster, 545 Laurier Drive, Swift Current, Sask. S9H 1L3 (306-713-8754).

• **Man.:** Louise Dufault, 82 Reil St., Winnipeg, Man. R2M 2M5 (204-256-9115).

• **Ont.:** Jasmine Holetich, 1871 King E., Hamilton, Ont. L8K 1V1 (416-549-5048, 525-9140).

• **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-3743, 937-0511).

• **N.B.:** Sue Breen, Castle Acres, Comp. 28, S.S. 3, Fredicton, N.B. (506-855-2815).

• **N.S.:** Linda Zambolin, 114 Regal Road, Dart. N.S., B2W 4H8 (902-434-8983).

• **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).

• **P.E.I.:** Debbie Richard, 19 Milbrooke Dr., Charlottetown, P.E.I. C1A 7Y2 (902-569-4490).

FINANCE:

• **Debbie Mitton**, 188 Dunbrack St., Halifax, N.S. B3M 3L8.

• **Judy Dickey**, 46 James St., Aylmer, Quebec J9H 4S6. (819-684-9102).

• **Ailsa Wood**, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7. (416-923-1669).

PROVINCIAL NEWSLETTER EDITORS

• **B.C.:** Pat Bowman, 926 W. 22nd Ave., Vancouver, B.C. V5Z 2A1. (604-736-0962).

• **Alta.:** Adeline Fiorioli, 8911-138 Ave., Edmonton, Alta. T5E 2A7.

• **Sask.:** Teri Gottselig, 98 Lockwood Rd., Regina, Saskatchewan S4S 3G2. (306-525-5136).

• **Man.:** Joanne Presunka, 1041 Howard Ave., Winnipeg, Manitoba R3T 1S1. (204-284-7143).

• **Ont.:** Jane Rogers, 10 Lyle Place, Kitchener, Ontario N2B 2J6. (519-576-3718).

• **Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1. (514-352-6245).

• **N.B.:** Nancy Mills, 20 Wilson Rd., Riverview, N.B. E1B 2V8. (506-386-3734).

• **N.S.:** Diane Forrest, 209-7 Parker St., Dartmouth, N.S.; Cindy Forward, Oyster Pond, Jeddore, N.S.

• **Nfld.:** Pam Vokey, P.O. Box 205, Gander, Newfoundland A1V 1W6.

• **P.E.I.:** Frances Piercey, 3 Sunset Drive, Charlottetown, P.E.I. C1A 3J6.

Classified Advertising

Advertising copy should be directed to Graphic Media,
2646 West 3rd Avenue, Vancouver, B.C. V6K 1M3.

Classified advertising rates: \$15.00 per column inch. Remittance must accompany ads.

WANTED — Dental Hygienist for a 3 man family preventive oriented practice. In Medicine Hat, Alberta. City of 40,000 people. Reply Dr. Gregory 304-578 3rd St., S.E., Medicine Hat, Alberta T1A 0H3. Phone 527-5526.

My hygienist is returning to school after 7 years of service in my practice. I am looking for someone like her to handle my recall programme. My staff enjoy a congenial atmosphere and a beautiful north view of the city and mountains. 8 a.m. to 4 p.m. Phone 873-1911, evenings 732-3002.

FULL TIME HYGIENIST REQUIRED IMMEDIATELY for preventive Dental Office in Cranbrook, British Columbia. Good salary and benefits. Please contact. Dr. D. Sweet at 204 - 828D Baker Street, Cranbrook, B.C. or phone 112-604-489-4551.

A WORKSHOP FOR PUBLIC HEALTH WORKERS

TITLE: "Ideas on How to Improve Health Education Programs: Adult Education Techniques."

DESCRIPTION: This one day workshop will actively involve participants in examining barriers to communication and in identifying effective communication skills. In addition, the workshop will focus on the effective use of adult education techniques to enhance learning in health education programs. This workshop is aimed at Public Health Workers involved in co-ordinating and implementing health education programs to lay persons as well as to other Health Professionals.

RESOURCE PERSONS: Anne Schultz, Health Educator, Canadian Council on Smoking and Health, Halifax, Nova Scotia (902-435-7671). Ricki Devlin, Health Educator, Medical Services Branch, Health and Welfare Canada, Vancouver, B.C. (604-666-6768)

DATE: October 23, 1981.

TIME: 9.00 - 4.00.

LOCATIONS: Atlantic Health Unit
Sunnyside Place - 3rd Floor
1600 Bedford Highway
Bedford, Nova Scotia
(902-835-7181)

Richmond Health Dept.
6911 No. 3 Road
Richmond, B.C.
(604-273-8381)

COST: \$50.00 - Members \$55.00 - Non-Members

ADDRESS: Canadian Health Education Society
P.O. Box 2305, Postal Station "D"
Ottawa, Ontario K1P 5K0

(Please make cheques payable to the Canadian Health Education Society.)

INDEX TO ADVERTISERS

IFC	Dentsply International
53	John O. Butler
56	Colgate Palmolive
62	Horner
65	Hu-Friedy
70	Marpo-Dent
OBC	Proctor and Gamble

Answers to Self-Assessment Test

1. e	6. c
2. d	7. b
3. c	8. d
4. a	9. d
5. b	10. f

Ministry of Health Dental Hygienists

Competition H81.2422

\$20,784 - \$23,808

There are currently eight excellent opportunities available throughout B.C. for career-minded enthusiastic hygienists. Competition will also establish an Eligibility List for future vacancies. Duties include assuming responsibility for pre-school, school and adult dental programs, delivering educational/motivational lessons, inspections/referrals and supervising staff; other related duties as required.

Qualifications — Graduation from recognized university with diploma in dental hygiene or equivalent. May be required to drive personal car on expenses or Government car.

Return applications
IMMEDIATELY.



**Province of British Columbia
Public Service Commission**

Positions
are open to both
men and women.
Canadian citizens are given
preference. Obtain applications
from, and return to address below.

544 Michigan Street, Victoria, B.C., V8V 1S3

Ministry of Health Dental Hygienists

Competition K81.1858-23

\$19,248 - \$22,044

At Tranquille, (near Kamloops), establish and maintain dental program; provide technical services; provide program of instruction to develop and implement dental care program including lectures, demonstrations, consultations to direct care staff, parents, foster parents, group home operators, etc.; inspect dental hygiene of persons served by Tranquille with referrals to dentist; co-ordinate with Resident Life staff for visits of podiatrist and orthotist; other related duties.

Qualifications — Diploma in dental hygiene or equivalent; registration and license as Dental Hygienist in B.C.; preferably some experience subsequent to graduation.

Return applications
IMMEDIATELY.



**Province of British Columbia
Public Service Commission**

Positions
are open to both
men and women.
Canadian citizens are given
preference. Obtain applications
from, and return to address below.

544 Michigan Street, Victoria, B.C., V8V 1S3

Help build a bright
tomorrow
Give generously to



today!

Send your tax deductible
contributions marked
DENTAL HYGIENE to:

Canadian Fund for Dental Education
Suite 205, 44 Eglinton Avenue West
Toronto, Ontario M4R 1A1

Major new clinical evidence shows...

Crest has achieved a significant step forward in its anticaries protection

New Improved Formula Crest, which uses sodium fluoride in a hydrated silica abrasive system, provides significantly more anticaries protection than previous Crest. These results were demonstrated in the largest dentifrice clinical study ever published! A second major study² also demonstrated the improved anticaries effectiveness of the new formula.

The new product has been pH-stabilized and formula-balanced to provide more fluoride to react with tooth enamel.

For further information please write to: Mr. H. R. Hamilton, Professional Services Division, P.O. Box 355, Station "A," Toronto, Ontario M5W 1C5.

Improved protection for
Improved Formula Crest

New Improved
Formula Crest 40.7%

Previous
Crest 23.4%

1. Zacherl, W. A., "Clinical Evaluation of a Sodium Fluoride-Silica Abrasive Dentifrice," *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

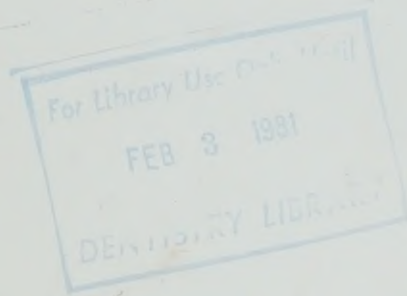
2. Beiswanger, B. B., Gish, C. W. and Mallatt, M. E., "Effect of a Sodium Fluoride-Silica Abrasive Dentifrice Upon Caries," *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

NEW! IMPROVED FORMULA!
Crest
for even better anticaries
protection within your
preventive program

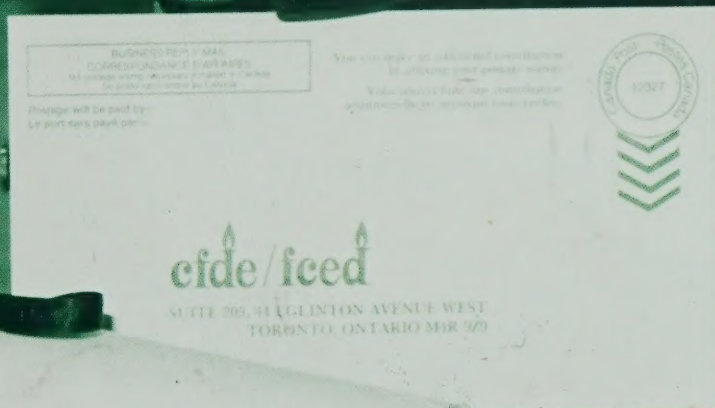
† "Crest contains sodium fluoride which is, in our opinion, an effective decay preventive agent, and is of significant value when used in a conscientiously applied program of oral hygiene."

TER 1981 HIVER

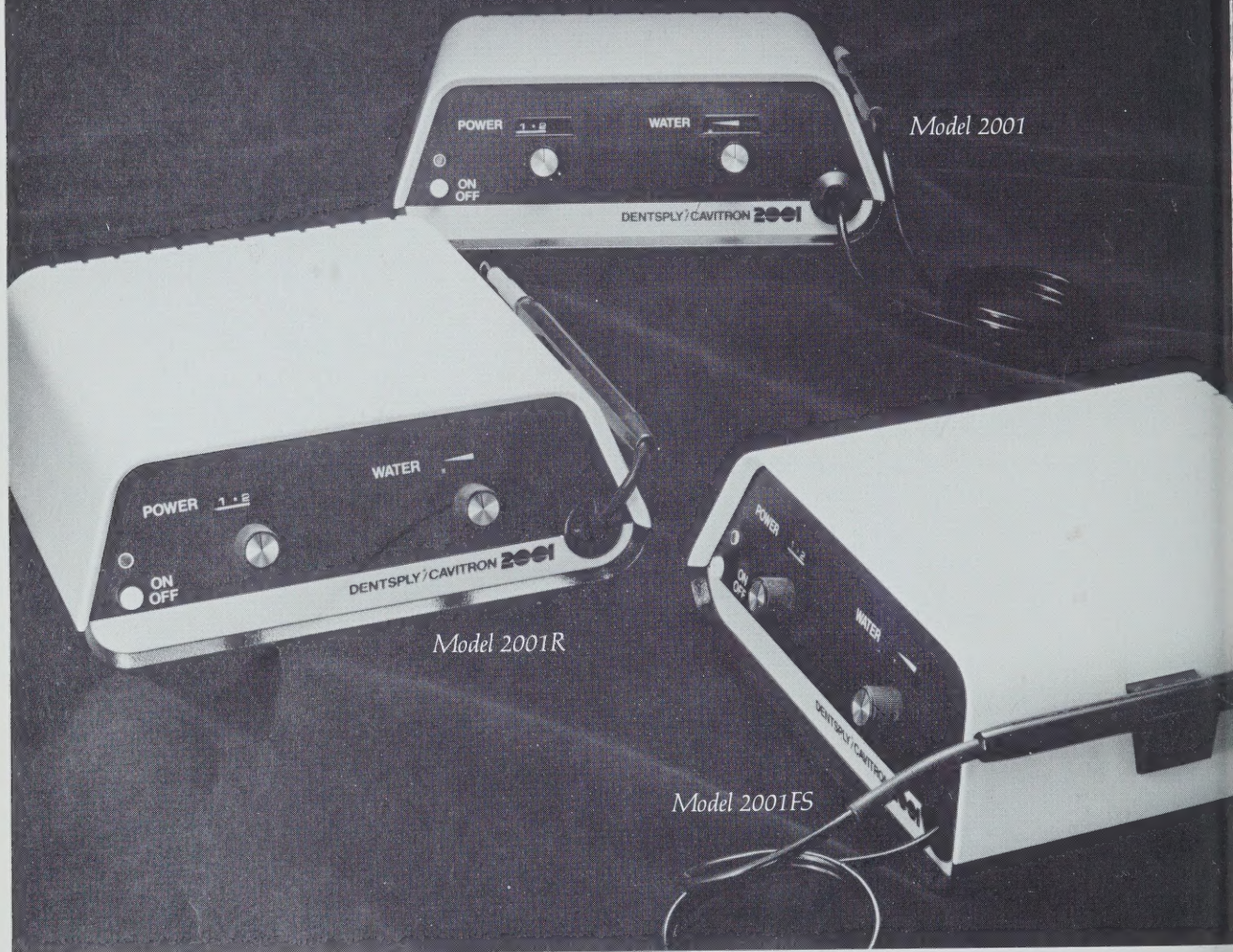
VOLUME 15, NO. 4



the canadian dental hygienist • l'hygieniste dentaire du Canada



The Dentsply-Cavitron® 2001 Series.



Model 2001

Model 2001R

Model 2001FS

Three different choices in the way you operate... one superb level of performance.

All three models deliver the same gentle, efficient, reliable performance Dentsply-Cavitron units are famous for. All three provide up to 28 watts of scaling power with automatic insert tuning, solid state circuitry and visual water flow control. Choose the operating features best suited to your style of practice:

The Model 2001FS has an "on-off" fingerswitch, which many dentists find

contributes to more continuous and efficient scaling procedures. Flick "on" for instant activation of the unit. Flick again for "off". There is no foot control.

The Model 2001R offers conventional foot control operation and the convenience of automatic handpiece retraction.

The Model 2001 has a plug-in handpiece and cable assembly with conventional foot control.



These Dentsply-Cavitron Ultrasonic Scaling Devices are Acceptable for use in scaling and cleaning surfaces of teeth in conjunction with other suitable prophylactic measures.

**DENTSPLY®
Equipment**

D Dentsply Canada, Ltd.
Toronto, Ontario M5T 1A1

© 1981 Dentsply International Inc.
All rights reserved.

The Canadian Dental Hygienist L'Hygieniste Dentaire du Canada

WINTER 1981 HIVER

VOLUME 15, NO. 4

Articles/Articles

- 00 Attitude of Canadian Dental Hygienists toward
Mandatory Continuing Education. M. Forgay, Dip.D.H., B.Ed., M.A.

Features/Reportage

- 74 President's Message
31 Alternative: Organizing Continuing Dental Education
33 Convention '81: People and Events
38 Self-Assessment Test: Temporomandibular Joint

Departments/Sections

- 75 Newslite
95 Directory 1981-82
96 Classified Advertising
96 Index to Advertisers

THE CANADIAN DENTAL HYGIENIST is the official journal of the Canadian Dental Hygienists' Association and is published quarterly.

All journal communications should be directed to the Editor, except subscription and advertising matters which should be addressed to the respective staff members.

Subscription rates for non-members are: \$15.00 per year in Canada and \$22.50 per year foreign.

The opinions expressed in editorials or articles are those of the authors and do not necessarily represent the views of the Association, the Publisher or the Editor.

L'HYGIENISTE DENTAIRE DU CANADA est la revue officielle de l'Association des hygiénistes dentaires du Canada et est publiée à tous trois mois.

Toutes communications ayant trait à la revue devraient être adressées au Rédacteur en chef, à part les abonnements et tout ce qui concerne la publicité, ce qui, de leur côté, devraient être adressés aux membres du personnel respectifs.

Les tarifs d'abonnements pour les non-membres sont les suivants: \$15.00 par année au Canada et \$22.50 par année en pays étranger.

Les opinions exprimées dans les éditoriaux ou dans les articles des auteurs et ne représentent pas nécessairement les points de vue de l'Association, de l'Editeur ou du Rédacteur.

Editor/Redacteur en chef
Stephanie Nagle, 2221 Victoria Avenue,
Windsor, Ontario N8X 1R2

Publisher/Editeur;
Advertising Manager/Gérant de la publicité;
Subscriptions Manager/Gérant des abonnements
Doug Gordon, Graphic Media
2646 West 3rd Avenue,
Vancouver, B.C. V6K 1M3

Advisors/Counseillers
Joan Voris, 3589 Osler Street,
Vancouver, B.C. V6H 1M3

Marjorie Dimitri
1606 Ayleslynn Drive
North Vancouver, B.C. V7J 2T3

Louise Gosemick
8078 De Lorimier,
Montreal, Quebec H2E 2P9



MEMBER PUBLICATION
AMERICAN ASSOCIATION OF DENTAL EDITORS
617 6/CN ISSN 0008-3380

President's Message



Pat Grant: Dental hygiene is a serving profession. We are at our best helping others.

I am happy to have this opportunity to send a message to you, as the president of your national association. It is mid-fall as I write these words, although you will not be reading them until the busy Christmas season is upon us. The fall of each year marks a beginning for many things. As courses commence for a new term, we plan our winter activities and begin our committee work again.

The autumn marks a new beginning each year for CDHA as this is the usual time for the new executive to begin their term of office. I am realizing how busy this term will be, and as I feel overwhelmed with work I ask myself, as others have asked, why I agreed to accept the presidency of a national association. The sincere answer is service. I wish to serve my profession in whatever manner can best be utilized. This is, I believe, the very reason why we are in a field such as dental hygiene.

Dental hygiene is a serving profession. We are at our best when helping others; whether it be helping patients accept responsibility for their own oral health or helping a student learn the art of our profession. Too often we become far removed from the grassroots of our profession. It is easy to become overly concerned about our professional image, fringe benefits, etc., at the expense of the ultimate goal of delivering quality care to all.

As Christmas approaches and we get caught up in the hassles of too much to do in too little time, we can forget the real meaning of Christmas. Parallel this to your profession and ask yourself if you are so caught up in the politics and problems of work that you have lost sight of the true meaning of being a health professional.

Just as we try to recapture the true spirit of Christmas and it eventually shines through for each of us in some insignificant event such as the smell of home cooking or the quiet of an evening snowfall; the true spirit of being a health professional will emerge, if we keep in the foreground the real purpose of a health profession.

May each of you find the time to renew your faith and spirit over the holiday season, also the time to reassess your direction and goals, both personal and professional.

The 1981-82 executive looks forward to a busy and productive year. We are pleased to have the opportunity to serve you and appreciate the valuable experience it will afford us.

Pat Grant

Newsline

'We Ariens love to be the boss' says Pat Grant

Twenty-seven-year-old Patricia Grant will be the CDHA President until next May when the CDHA board of directors meets in Toronto. It will be a short term only nine months, but Pat has concrete plans of what she would like to accomplish during her term of office.

"My goals are to finish the liability insurance issue, complete the groundwork of investigating incorporation for the CDHA, and improve communication between the various dental associations."

Pat, a Halifax hygienist, will be spending at least one or two hours every day in CDHA business during her term of office and feels that unconsciously and consciously she tried to get her life in order before accepting the three year commitment of becoming President.

"I've been very lucky - even my baby was born at the right time. This year my career and personal life will allow me the flexibility to function as President."

Pat has a very responsible and understanding husband and a 13-month-old son whom she refers to as a CDHA baby since he was born on the first day of the

1980 CDHA board meeting. Besides taking care of her family and CDHA obligations, Pat works part-time in a periodontal practice.

This '72 Dalhousie grad has served the Nova Scotian Dental Hygienists' Association as director to the CDHA board, Manpower and Utilization Chairman, Membership Chairman, Newsletter Editor, Vice-President, President, and Secretary.

When asked what prepared her for her duties as CDHA President, Pat points to her six years of full-time teaching in the dental hygiene program at Dalhousie University and her post-diploma education which includes a B.A. in Psychology and several graduate courses in educational psychology.

Pat describes herself as organized, approachable, and "if Kate (MacDonald) were here, she'd tell you that I was tough-skinned."

During Pat's term, her executive council includes: Peggy Larder, secretary; Debbie Mitton, treasurer; Linda Berry, president-elect; and Mary Peltier, first vice-president.



Marge Bailey, past-president, congratulates Pat Grant.

A Change in Name for Sask. Dental Nurses

Saskatchewan dental nurses officially became known as dental therapists on July 1, 1981. This change was brought about when the new Saskatchewan Dental Therapists' Act was proclaimed.

Dental nurses have been providing services in the provinces since 1974, when the Saskatchewan Dental Plan for children was implemented. Since the beginning, the original name caused problems because it was difficult to get the public to think of them as dental operators. Secondly, many people became confused because of the similarity with the title of the Dental Nurse and Assistants Associations. Also, as a result of this similarity, the association of Saskatchewan dental nurses could not become legally recognized in the province.

Dental therapist was the name chosen to replace dental nurse, as this term was used by many nations who utilize dental personnel with similar training.

Saskatchewan dental therapists perform a variety of preventive and treatment services including cleaning and polishing teeth, providing dental health education, preparing teeth for restora-

tions, lining and placing amalgam and composite restorations, performing deciduous pulp tomies, preparing deciduous teeth and placing stainless steel crowns, and extracting deciduous teeth. In addition to working in the Dental Plan for children, dental therapists are employed in the new Adolescent Dental Program which began in the fall of 1981. As well, dental therapists are employed by private dental practitioners to provide limited preventive and restorative services for patients of all ages.

Not only does the Saskatchewan Dental Therapists' Act provide for a change of name, it also allows the therapists more responsibility in the licensing and regulation of dental therapists. It is hoped this new Act will help establish dental therapists as a recognized health profession in Saskatchewan.

For further information contact:
Ms. Barbara Long
President - Saskatchewan Dental Therapists' Association
2741 Preston Avenue
Saskatoon, Saskatchewan
S7G 2G1

CFDE Fellowships Awarded

The Canadian Fund for Dental Education recently awarded teacher training fellowships to eight dental hygienists for the 1981/82 academic year.

Starting this year, Procter & Gamble Inc. kindly agreed to underwrite the cost of two fellowships and they have been awarded to Mrs. P.M. Johnson, now entering the second year of her Bachelor of Science in Dentistry program at the University of Toronto, and Ms. D.S. Slinn who will be attending the University of Washington to participate in a degree completion program for expanded functional dental auxiliaries.

Six fellowships are sponsored by CFDE and the recipients are:

Ms. F.R. Jeffs, Ms. D. Kasianiuk, Ms. S.D. Matheson, Ms. N.L. Priamo, Mrs. S. Silverman, all entering the second year of their Bachelor of Science in Dentistry program at the University of Toronto, and Mrs. J. Smorang, attending a teacher training program for health professionals at the University of Southern California.

Newsline



Original Hygiene Hasty Notes by Sue Scott ©

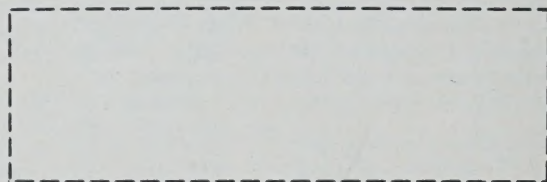
To order your package of 8 notes
(4 different situations in all)

send your \$4.00 cheque or
money order to:

**The Toronto Central Component
Dental Hygiene Society
c/o Mrs. Helen Saris
601 - 1175 Broadview Avenue
Toronto, Ontario M4K 2S9**

WAS THIS JOURNAL CORRECTLY ADDRESSED?

Every copy of the journal returned to us costs the Canadian Dental Hygienists' Association approximately fifty cents. If you are moving permanently, please let us know two months before changing your address. If the address label on this publication is not correct, please clip it, then paste it in the blank provided and mail this entire coupon to us, including your new address! Thank you.



Name _____
Address _____
City _____
Province _____
Postal Code _____

Mail to: Jo Gardner, CDHA Membership Chairman
1125 West 54th Avenue
Vancouver, B.C. V6P 1N3

DENTAL HEALTH BUTTONS

PLEASE NOTE: Order in lots of 100 only. Orders received after March 15th may not be delivered in time for Dental Health Week.

A PROJECT OF **The Canadian Dental Hygienists' Association**
L'association Canadienne des Hygienistes Dentaires



Thank you for
your support.

ORDER FORM

CDHA LAPEL BUTTONS
c/o MRS. DALE SCANLAN
53 ARIEL COURT
NEPEAN, ONTARIO K2H 8J1

NO. OF BUTTONS _____ @ \$25.00/100

AMOUNT OF CHEQUE _____

NAME _____

ADDRESS _____

CITY _____ PROV. _____

POSTAL CODE _____

ENGLISH ☐

FRENCH ☐

Remittance must accompany order, payable to CANADIAN DENTAL HYGIENISTS' ASSOCIATION.

**your
single
source...**

Butler

Toothbrushes—13 styles

of G•U•M® and Dr. Bass brushes.

Floss—Shred-resistant Unwaxed,

Fine Unwaxed, Bit O' Wax® and Tape.

Disclosants—Red Cote® Tablets or Liquid.

Other Preventive Aids: EEZ-THRU®

Floss Threaders □ Floss Mate® Floss Handle

□ Proxabrush® Handles and 4 refill sizes

□ Interdental Brush □ Stimulator Handle

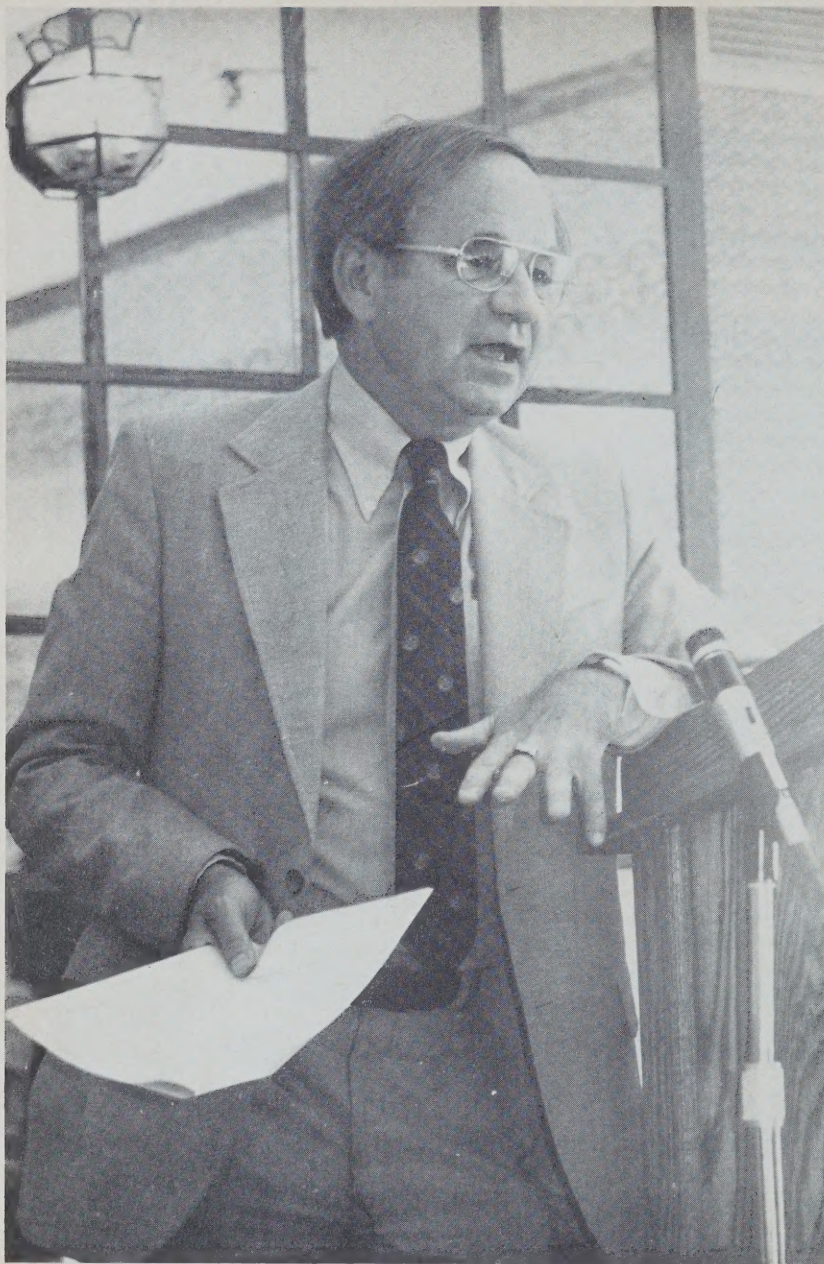
□ Mirolite® and Plakfinder® Mirrors □

Fluorides, Trays, and Proply Paste

□ PROTECT Toothpaste for Sensitive Teeth



For more than half a century you've been able to look to Butler as your source for quality preventive "home-care" dental aids whether you dispense or recommend. Available at better drug stores everywhere.



Dr. Don Lewis presents his "Demographic and Employment Profile of Dental Hygienists in Canada, 1979" Report.

The CDHA Board of Directors convened for the 18th Annual Session, August 29 and 30, 1981 in Calgary, Alberta. The speaker for the meeting was Joanne Clovis. Members of the board present were:

Marge Bailey, President; Pat Grant, President-elect; Linda Berry, First Vice-President; Linda Wiens, Treasurer; Mary Anne Wailing, Secretary; Diane Girardin, Immediate Past President; Barbara Hewton, Diane Eade, Marie Goldfinch, Evelyn McNee, British Columbia Directors; Laura Mowat, Winni-

fred MacDonald, Alberta Directors; Barbara Ferris, Saskatchewan Director; Gladys Stewart, Manitoba Director; Ailsa Wood, Judy Barnes, Linda McCance, Linda Perron, Rosemary Arsenault, Jasmine Holetich, Ontario Directors; Lucie Billette, Quebec Director; Jane Cummings, New Brunswick Director; Peggy Larder, Nova Scotia Director; Jean MacLean, Prince Edward Island Director; Ingrid Curtis, Newfoundland Director.

In addition the following observers were in attendance: Stephanie Nagle,

CDHA

Editor; Judy Dickey, Executive Secretary; Dale Scanlan, Community Dental Health Chairman; Elaine Good, Manpower and Utilization Chairman; Jo Gardner, Membership Chairman; Marjorie Miller, Education Chairman; Mollie Moore, 1981 Convention Chairman; Sharon French, International Liaison Representative; Cara Tax, Student Membership Chairman; Dianne Bryant, Auxiliary Liaison Representative; Pat Johnson, Data Bank Representative; Anne Bosy, C.S.A. Technical Committee on Dentistry; Kate MacDonald, C.D.A. Council on Health Care Representative; Trudy McAvity, New Brunswick; Lisa MacDonald, Nova Scotia; Fran Piercy, Prince Edward Island; Monique Gouldreault, Quebec Corporation; Nancy Fetter, Saskatchewan; Adeline Fiorillo, Alberta.

Dr. D.W. Lewis addressed the Board regarding the 1979 Manpower Study presenting the report "Demographic and Employment Profile of Dental Hygienists in Canada, 1979."

The board meeting was preceded by Finance Committee Meeting for those wishing to discuss the proposed budget.

An Editorial Workshop for all provincial newsletter editors was conducted by CDHA editor Stephanie Nagle and Marjorie Dimitri.

A workshop for board members facilitated by Nancy Fetter was also held to discuss various topics which have arisen throughout the year. At this workshop, Ron Berry spoke on liability insurance, Jo Gardner on membership, and Pat Johnson on portability.

The following summary highlights areas of interest from this year's board meeting:

1. Marg Miller was rewarded for her years of dedication to the dental hygiene profession by receiving Life Membership in the Canadian Dental Hygienists' Association.
2. One of our goals for 1981-82 is to increase membership. Another goal for this year is to prepare the groundwork for incorporation.
3. The CDHA endorses the concept of an International Dental Hygienists' Association.

1981 Board Transactions

4. Judy Dickey was awarded Honorary Membership in CDHA for her contributions to this association.
5. Our representative on the CDA Council on Education will annually provide the council with a list of four dental hygiene educators who are interested in participating in accreditation surveys of dental hygiene programs.
6. The location of the new executive secretary will be in Ottawa and formal office hours will be established.
7. The scope of the Long Range Planning Committee has been changed to that of a Long Range/Financial Planning Committee and is to be chaired by the immediate past president. The terms of reference and composition of this committee will be presented to the board by January '82.
8. A special Convention Planning Committee will be struck to re-assess the purpose, define objectives, and prepare a manual for our national convention.
9. A new position statement on the C.O.P System will replace the existing one in the handbook, and a statement on care for persons with special needs will be added. This new position statement will read:

"The CDHA recognizes the role of the dental hygienist in the oral health care of persons with special needs and recommends that:

- a) dental hygiene educators design curriculum changes to reflect effective utilization of dental hygienists in the provision of treatment for the elderly, the chronically ill, and the mentally and physically handicapped; and
 - b) that the CDHA promote the development of dental health education programs and preventive services in senior citizen homes, personal care homes, senior citizen day centres, and in institutional and community based care facilities for the chronically ill, and for the mentally and physically handicapped.
10. National Continuing Education Day will be held on March 13, 1982.
 11. The student table clinic competition is being re-evaluated by the student membership chairman.
 12. The printing of the Journal will be changed from its present location in Vancouver to Controlled Publications, Windsor, Ontario.

13. The Community Dental Health Committee will be developing a pamphlet on infant oral hygiene and a slide library for use by members interested in giving group talks.
14. \$3500.00 has been budgeted to complete the analysis and printing of the 1979 Manpower Study.
15. A Legislation Coordinator will be appointed to collect data regarding legislation, regulations, and labour standards.
16. The executive council will appoint a person to investigate the feasibility of a Benefits Committee.
17. The CDHA will proceed with the establishment of liability insurance for all members.
18. The amended Constitution and By-laws were given provisional approval until such time as CDHA becomes incorporated.
19. The executive council will appoint a person to re-evaluate the portability issue.

For those interested, the complete agenda book and minutes of this Annual Session are on file with members of the Executive Council, Provincial Directors, and CDHA Committee Chairman.



Members of the Board: Mary Anne Wailing (far left); Judy Dickey; Marge Bailey; Joanne Clovis; Pat Grant; Linda Wiens; and Diane Girardin.

COLGATE INTRODUCES A BREAKTHROUGH IN TOOTHPASTE FORMULATION.

TWO FLUORIDES IN ONE TOOTHPASTE.

New Colgate™ is the first and only toothpaste in Canada to combine the two fluoride compounds now most widely used to provide superior caries reduction.

In New Colgate, (0.76%) sodium monofluorophosphate and (0.1%) sodium fluoride have been incorporated in a hydrated alumina base. And a 3-year clinical study conducted in England,* confirms that this combination provides superior protection when compared to a single fluoride formula with sodium monofluorophosphate (0.76%).

The clinical results lend support to the recommendation made by a team of experts reporting on the U.S. National Caries Program,** that different combinations of fluorides, bases, etc. should be studied "to determine the combination that is most effective in preventing caries."

In summary, the clinical trial provides evidence that Colgate's combination of fluorides gives superior caries protection. We urge you to recommend the only product that combines two fluorides in one toothpaste.

New Colgate.

*Published in the British Dental Journal, October, 1980.

**Evaluation of the National Institute of Dental Research National Caries Program. Volume 1, November, 1979, Page 56.



Alternative: Organizing Continuing Dental Education

Jane M. Wong, R.D.H., B.A.

□□□
The working environment is superb for this exciting and rewarding job. The opportunity for inter-professional exchanges on a day-to-day basis is most stimulating.

□□□
In July 1979, a new position was established within the Division of Continuing Dental Education, University of British Columbia. A Program Coordinator was hired three days a week to assist the Director of Continuing Dental Education in the planning and implementing of continuing education programs for dentists and dental auxiliaries.

The successful candidate was Jane Wong, a graduate of the program of dental hygiene, Dalhousie University, Halifax, Nova Scotia. Jane is a Maritimer, born and raised in Saint John, New Brunswick. She came to Vancouver after graduation to work in clinical dental hygiene. After several years in private practice, she decided to change careers. Working and going to school part-time, Jane completed a degree in Early Modern European History at the University of British Columbia in 1977. At this point she was in an interesting situation. Having left a profession in which there were many opportunities for employment, she had chosen to study in a field where there were absolutely none. The history graduates of '77 were employed as gas jockeys and waitresses. The immediate solution was six months in private practice and a six month trip around the world. In March of 1979, the position of program coordinator was advertised in *The Canadian Dental Hygienist* and an opportunity was presented to return to her profession and have a new career as well.

The working environment is superb for this exciting and rewarding job. Continuing Dental Edu-

cation is located within the Division of Continuing Education in the Health Sciences. Six professions are represented: Dentistry, Nursing, Nutrition, Medicine, Pharmacy, and Rehabilitation Medicine. The opportunity for inter-professional exchanges on a day-to-day basis is most stimulating. On a more immediate level, Jane has greatly benefited from Dr. Malcolm Williamson's expertise in the field of continuing dental education. Dr. Williamson is Assistant Dean and Director, Continuing Dental Education.

The major responsibilities of Jane's position are to assist with planning and implementing continuing education programs for dentists and to plan and implement programs designed specifically for dental auxiliaries. The former involves administrative tasks such as budgeting, contacting clinicians, and assembling and editing promotional, course, and evaluation materials, while the latter encompasses the entire program planning process. The major steps in this process are determining needs, finding qualified resource persons, discussing course content, organizing, implementing, and evaluating the programs.

Another interesting aspect of the job is the coordination and supervision of the Orthodontic Module, a course in expanded duties in orthodontics for registered dental hygienists and certified dental assistants. This 40-hour didactic and clinical course is now being offered once a year at the Faculty of Dentistry, University of British Columbia. Successful completion of the program results in licensure by the College of Dental Surgeons of British Columbia. Jane also supervises Continuing Dental Education's province-wide network of Regional Coordinators by providing administrative support, maintaining communication among the coordinators, and planning and implementing the annual training session.

This fall another dimension has been added as the Division is experimenting with a new system for the delivery of continuing dental education. Satellite programming provides an opportunity for professionals living outside the lower mainland to

participate in live television broadcasts transmitted to 25 sites throughout British Columbia. Each location is equipped with a colour television monitor and a telephone hookup so that participants can ask questions and discuss the lecture with the clinician in the Vancouver studio. Jane is responsible for the program planning process, establishing a network of dental professionals who are responsible for administering the programs in their area, and working with the Satellite Coordinator to implement them.

The job skills required to be an effective program coordinator are: a thorough knowledge of dental terminology and its clinical application; good organizational, communication and writing skills; and the ability to plan and implement educationally sound continuing education programs. Jane is currently in the process of obtaining the theoretical educational background as she has been accepted into the Master's program in Adult Education at the University of British Columbia.

Jane has recently joined the ranks of working mothers. She is married to a dentist in private practice in Vancouver and they have a ten-month old daughter, Joanna. Because of her job's schedule, Continuing Dental Education offers the possibility of combining motherhood and a challenging career - an ideal alternative.



Jane Wong

Do you provide Dental Hygiene Services in an unusual practice setting?

The Working Group on the Practice of Dental Hygiene, a federally appointed committee studying the dental hygiene profession in Canada (see the Canadian Dental Hygienist, summer 1981 issue), needs your assistance. Part of our task is to determine how and where dental hygienists are currently working. Dentistry is exploring new approaches to offering dental services, such as franchises and retail dental practices (see the summer issues of the CDA Journal). Linda Krol told hygienists at the Calgary convention about her practice as an independent contractor. Members have written in our own Journal of their

experiences providing hygiene services in locations such as residences for the mentally handicapped.

We need to know what changes are occurring in dental hygiene practice. If you are involved in a non-traditional practice arrangement (or know someone who is), take one minute to answer the following questions about yourself (or pass this form on to your colleague). You may remain anonymous if you wish. If you want to share your experiences and/or ideas more fully, don't hesitate to write us a note. Please respond as quickly as possible. Thanks for your assistance.

1. **Type of Employer** - Describe clearly and fully, indicating uniqueness of the situation. Examples include drug company, dentist, reformatory, community agency, yourself.

2. **Name of Employer**

3. **Nature of Services Offered** - May indicate more than one category.

- ☐ a. Clinical - traditional
- restorative
- other _____
- ☐ b. Educational
- ☐ c. Consultative
- ☐ d. Research
- ☐ e. Sales Promotion
- ☐ f. Other (specify) _____

4. **Days/Week worked at this job** _____

5. **Payment for services** - You receive:

- ☐ a. Salary
- ☐ b. Commission
- ☐ c. Salary plus commission
- ☐ d. Payment direct from client/pt.
- ☐ e. Other (specify) _____

6. **What are the requirements for supervision in your province?**

- ☐ a. Direct
- ☐ b. Indirect
- ☐ c. General
- ☐ d. Combination

7. **Does your practice meet the current supervision requirements?**

YES _____ NO _____

Return to: Mrs. Pat Johnson,
Oak Deane,
R.R. 2
Aurora, Ontario L4G 3G8.

As quickly as possible

Convention '81

Determination is key to Convention Chairman's success



Molly Moore: "If you've determined you can do it."

"It's like having a four-day-long wedding and the guests never go home." These were the hoarse words of Molly Moore, 1981 Convention Chairman, when close to 300 CDHA members met in Calgary for the annual convention, August 30, 31, September 1 and 2.

Many obstacles were overcome in preparation for this year's convention; the biggest one being the mail strike. Registration forms didn't come through and pre-convention publicity couldn't be sent out. Escalating costs also had to be contended with. "For example," explains Moore, "we were given an estimate of \$8.95 per person two months before a luncheon and when they finally let us sign the contract, the price per lunch had jumped to \$15.13. Even simple things like coffee costs 55¢ a cup now. Fortunately we had a large registration to offset costs."

Moore felt that the scientific program was the most successful event of the convention. Early in the planning phase the committee decided to focus heavily on the scientific program and, as a re-

sult, arrangements were made to feature three prominent speakers.

When Moore was asked what advice she would give '82 Convention Chairman, Maureen Donoghue of Toronto, she replied, "Get dedicated committee people. I never once had to check up on my people. You also need one other person, ideally your scientific chairman, who cares about how the convention turns out as much as you do. It's like having a co-chairman."

If you're determined, you can do it. If you're not, it's easy to give up."

The Calgary Convention, with its theme "Keep Abreast, Come West", marked the climax of a year's work for Moore and her 12 member committee consisting of: Pam Waters, Scientific; Sherry Saunderson, Social; Joyce Geldreich and Karen McKeone, Accommodations; Isabel Pillidge and Wendy Anderson, Registration; Vicky Duncanson and Karen Kopciuk, Hospitality; Diane Howes, Secretary; Sheila Snook and Sandy Sinclair, Social; and Faye Bailey, Financial.



Marjorie Dimitri gives some advice to Trudy McAvity, New Brunswick director, and Jane Rogers, Ontario newsletter editor at the Newsletter Editor's Workshop which was one of the first programs that the convention committee organized.

Convention People and Events



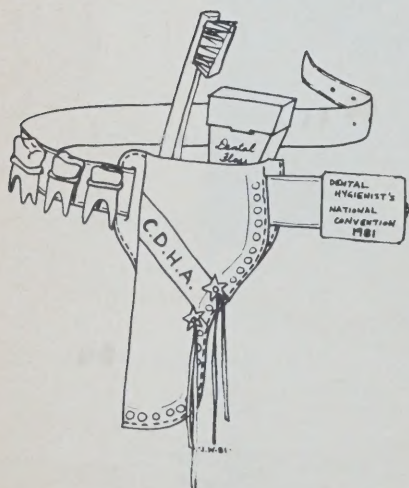
CDHA cowgirls - Sherry Saunderson, social committee chairman; Linda Weins, secretary to the board; Linda Berry, president-elect.

Social committee dished up some down-

Western hospitality figured largely in the 1981 convention events beginning with the opening festivities and ending with a genuine, Calgary stampee-style rodeo.

The opening dinner was provided by members of the Southern Alberta Den-

tal Hygienists' Society who entertained convention registrants in their own homes. Following the "Host Dinner", registrants returned to the main hotel, The Sandman Inn, for an evening of "Fun and Frolic" featuring live entertainment by hygienists organized by the



Scientific Program: the best yet

Pam Waters spearheaded the scientific program which was claimed to be the best yet by many convention participants.

Anna (Matsuishi) Pattison, R.D.H., M.S., Associate Professor of Periodontics and Dental Hygiene at the University of Southern California and co-author of the classic dental hygiene clinical manual *Dental Hygiene: The Detection and Removal of Calculus* presented a full day seminar on "Periodontics for the Dental Hygienist - Clinical Perspectives" which included diagnosing and treatment planning, instrumentation: root planing, curettage, considerations in making decisions for referrals, and fluoride desensitization.

On the second day, epidemiologist and clinical investigator Herschel Horowitz, D.D.S., addressed the topic of "Fluorides, Sealants, and Plaque Control" commenting on why fluoridation should be the cornerstone of caries prevention, the best agent for topical fluoridation, the value of sealants in preventive dentistry, and the value of school-based plaque control programs.

Finally, Linda Krol spoke on "Alter-

natives to Current Methods of Private Practice."

Unique to this year's convention was the number and variety of table clinics presented by Canadian hygienists. These included:

"A quick reminder! Neglected procedures in patient evaluation" by Diane Kasaniuk, Susan Matheson, and Nancy Priamo; "Alternatives in dental hygiene practice" by Kerry Fordyce; "Dental health care for the aged" by Barb Zier; "Dental health services at Alberta's Children's Hospital" by Sylvia Vause; "Dental public health services in British Columbia" by Donna Gunther; "Effects of swimming pool water and fluoride on exposed tooth surface" by Joan Conklin; "Federal publications for dental auxiliaries" by Sharon French; "Information trading post - Calgary local board of health" by Teresa Finnegan and Brenda Ryan; "Saskatchewan dental therapist - hygienist program" by Julie Wasylenska; "To habit or not to habit: Sugar levels in baby foods" by Harriet Gardner, Laura McCormick, and Susan Meier; and "University of Toronto Post Diploma Program" by Fran Jeffs.



Dr. Herschel Horowitz: "Fluoride should be used intelligently for the individual. To have a practice where no one over twenty gets fluoride is absurd."

e hospitality

Northern Alberta Dental Hygienists' Society.

Over the next few days, registrants attended a brunch sponsored by the Government of Alberta, a breakfast at the Calgary Tower, and the President's Luncheon and Reception honouring outgoing CDHA president, Marge Bailey. Authentic cowboy hats were provided and everyone had to take an oath promising that since they had been 'duly exposed to exceptional amounts of heart warmin', tongue loosenin', back slappin', neighbour lovin' Western spirit (that they would) communicate this here Calgary brand hospitality, to all folks and critters who crossed their path hereafter."

The highlight of the social activities was the rodeo party organized by the Canadian Dental Association. Five rodeo competitions were staged between cowboys from "Team West" and "Team East" featuring: bareback bronc riding, calf-roping, saddle bronc riding, steer wrestling, and ladies barrel racing. The rodeo party was the largest social event ever staged at a Canadian Dental Convention.



Participants view Sylvia Vause's table clinic.



Straight from the source . . . Linda Krol tells her story

"Never say never" - that was how Linda Krol, R.D.H., began her personal story to a room full of hygienists at the '81 CDHA Convention in Calgary, Alberta, of her uphill battle for the right to be an independent contractor.

Linda says "I can have fun with it now, but it was traumatic at the time." And in her book titled *A Room With No Window*, Linda says that "my experience with the Board of Dental Examiners was a treacherous ordeal."

Linda began her story by describing a January '76 midwinter meeting of the Southern California Dental Hygienists' Association where an attorney named Jack Willis explained that recent changes in the California Dental Practice Act would allow hygienists to become independent contractors.

Feelings of frustration

Before this meeting, Linda had felt frustrated with her professional and financial growth after having worked for ten years with Dr. Richard Steiner and Dr. Curtis Martins. The dentists also were frustrated. Patients were having to wait ten months for a hygiene appointment, and the dentists needed the hygiene room to accommodate their swelling patient load. When the physician in the office next door retired, Linda had dreams of opening up a hygiene wing in the vacant space.

At the midwinter meeting, Linda asked the attorney about her fantasy to which he replied, "What you want to do not only is possible, but you should do it."

On these encouraging words, Linda asked her dentists their opinion of her idea and, after they had checked with their accountant, she had her answer, "If you can do it, do it."

Getting approval

After enlisting Jack Willis as her attorney, Linda began her plans to renovate the next door office into a hygiene wing of Steiner and Martin's dental practice. The first item to be taken care of was to get approval of her idea from the State Board. Within the next six months, Jack Willis had received a letter of confirmation from the Executive Officer, Committee on Dental Auxiliaries, stating that Linda's proposed practice

"appears to satisfy the . . . regulations adopted by the Board."

Acting on this letter, Linda applied for a bank loan at the Crocker Bank in downtown Los Angeles. As a measurement of her projected income, Linda brought to loan officer, Alex Schultz, two years of appointment books showing that she was booked ten months in advance, her cancellation box which was filled with names of patients who wished to be called in if by luck someone cancelled, and a list of the equipment costs and the lease-hold improvement plans. Schultz questioned the legality of her intentions and after four hours of discussion proclaimed that as far as he was concerned they had a deal, but he needed three working days to firm things up with their legal department. Three days later Linda received a call from Schultz asking "who's buying the champagne - you or me?" and informing her that her application for a \$65,000 loan had been approved on her signature alone.

Construction for her office wing started in the fall and on December 20th she opened for business. Linda told us that "the place looked like a florists shop with good luck horseshoes everywhere from patients and dentists." This December will mark the fifth year of Linda's business venture, but it hasn't been without hardship.

The ordeal begins

Three weeks after her opening Linda received a formal complaint from the State Attorney General's Office acting on behalf of the State Board of Dental Examiners. Linda was charged with practising without the control of a dentist and Dr. Steiner was charged with opening a second office without proper proceedings. Linda continued to practice and pay legal fees which eventually mounted to \$14,000 while the State Board continued to discuss her case.

In February 1978, eight months after the allegations had been registered against her, Linda and her newly retained attorney, Richard Golden, went to work on putting the issue to rest. An agreement was made whereby Linda agreed to place the referring dentists' names over hers on the door to her suite and to notify the Board 45 days in

advance before accepting a patient from any other dentist.

Today Linda employs two hygienists and a receptionist. Her office suite connects with Dr. Steiner's office via a short hall and all patients requiring an examination, radiographic diagnosis, or consultation can be easily seen by the dentist. Patients are billed directly by Linda's receptionist and 5,000 patients are on a regular recall system. Linda has her window and jokes that the "plants live now."

Contracting arrangements in California

When questioned about the number of hygienists who are working on contracts with dentists, Linda said that in California over 100 dentists and hygienists are working symbiotically and have come up with good arrangements within the framework of independent contracting. Anyone who wishes more information about Linda or who would like a copy of her book (\$12.50 Canadian) should write: Linda A. Krol, R.D.H., Del Amo Medical Centre, 2135 Hawthorne Blvd., Suite 152, Torrance, CA. 9053.



Linda Krol, the first independent contractor in the U.S., was voted Woman of Achievement for 1978 by the National Federation of Business and Professional Women.



HU-FRIEDY GRACEY CURETTES LEAVE THEIR COMPETITION BEHIND

When it comes to sharpness, durability, uniformity, design, balance and over-all technical excellence, Hu-Friedy has no qual. Every Hu-Friedy Gracey Curette is carefully handmade by a skilled technician through 31 manufacturing operations and rigorous inspections. Then—and only then is it sent to you with the industry's strongest guarantee!

**MADE
IN
CHICAGO
U.S.A.**

Gracey Curettes are available in four design series:

- Finishing (Standard)
- Prophecy (P)
- Rigid (R)
- Mesial—Distal (MD)

The Hu-Friedy Guarantee:

If you are not 100% completely satisfied with the quality or workmanship of any Hu-Friedy Gracey Curette, for any reason, simply return and we will replace or refund your full purchase—with no questions asked!

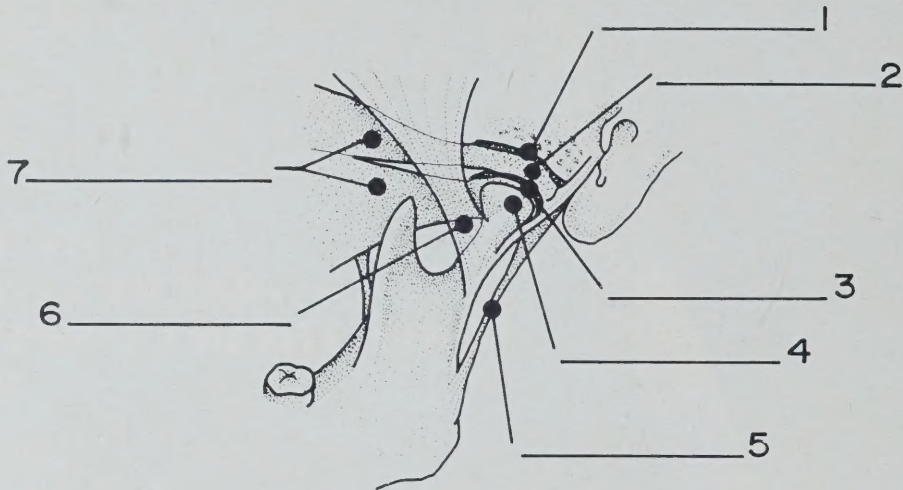


Hu-Friedy

Self-assessment test

Temporomandibular Joint

(For answers see page 96)



PART A

- On the above diagram match the labelled areas to the appropriate structures listed below:
 - Synovial cavity _____.
 - Pterygoid muscle _____.
 - Condyle _____.
 - Temporomandibular ligament _____.
 - Articular disc _____.
 - Stylomandibular ligament _____.
- Symmetrical movements of the mandible include:
 - Protrusive-retrusive
 - Lateral-protrusive
 - Opening-closing
 - A and C
 - A and B
 - All of the above
- When the mandible at rest is moved to the patient's left, the right condyle is termed the:
 - contralateral condyle
 - ipsilateral condyle
 - non-working condyle
 - A and C
 - B and C
- Which of the following could not be considered trigger factors in the diagnosis of TMJ (Myofascial pain dysfunction syndrome - MPD)?
 - stress
 - premature contact
 - muscle spasm
 - loss of posterior teeth
 - anterior overjet
 - all of the above could be considered trigger factors

- Hypnosis, as a treatment modality for TMJ dysfunction, is effective in that it:
 - produces relaxation and relief from anxiety
 - is capable of reducing pain itself
 - is a complete treatment in itself
 - A and B
 - all of the above

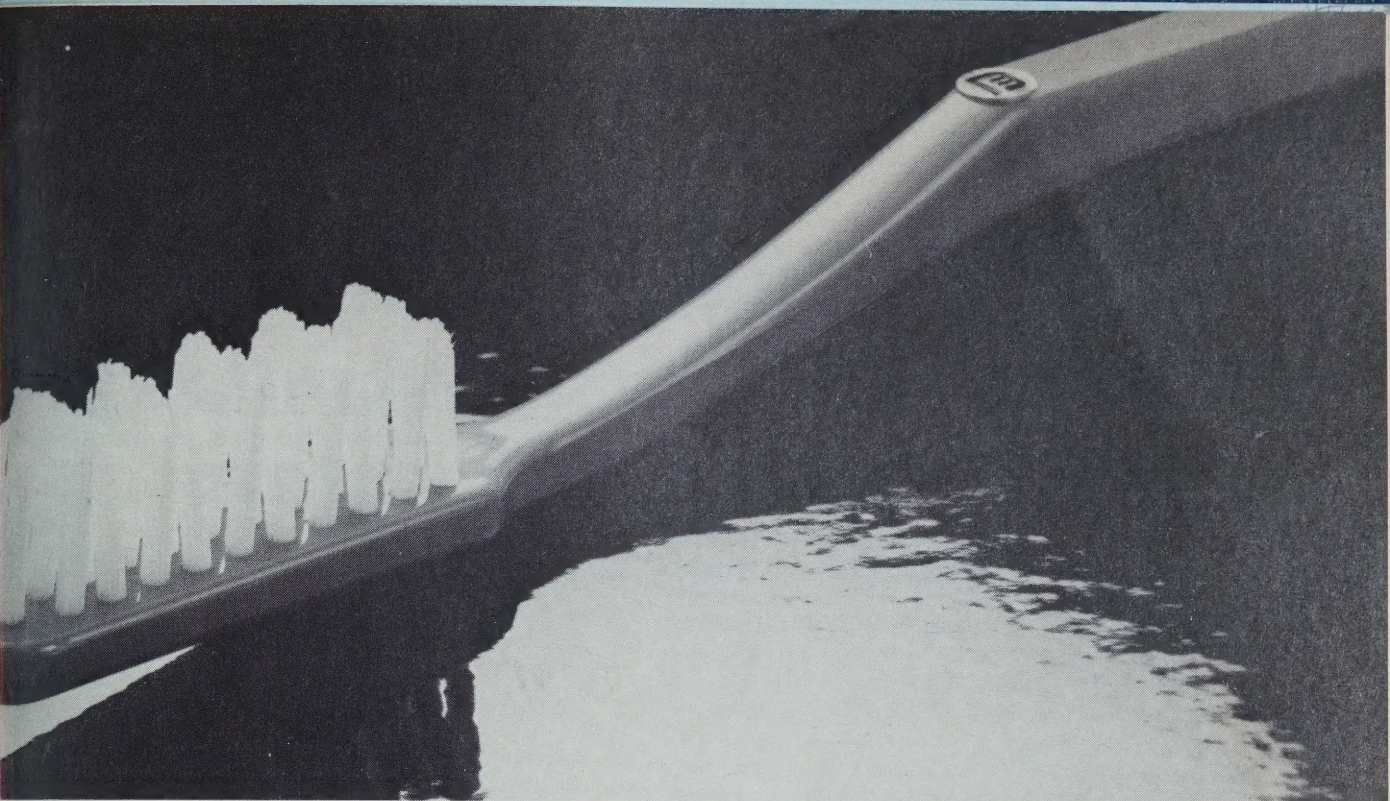
PART B - TRUE OR FALSE

- Pain is always associated with TMJ dysfunction.
- Biofeedback has been successful in the treatment of TMJ dysfunction.
- TMJ dysfunction-pain syndrome usually occurs at random without a pattern of occurrence and with no relation to function.
- Complete denture patients do not suffer TMJ disorders.
- There is no need to exercise special procedures to minimize muscle and joint injury while performing dental treatment (including dental prophylaxis) in successfully treated TMJ patients.

Selected Bibliography:

- Kraus, B.S.; Jordan, R.E.; Abrams, L.; "Dental Anatomy and Occlusion". Baltimore, Maryland; The Williams and Wilkins Co., 1969.
- Mikhail, Mongi and Rosen, Harry. "History and etiology of myofascial pain - dysfunction syndrome." The Journal of Prosthetic Dentistry, Vol. 44, No. 4: 838-444, 1980.

Peggy Larder, R.D.H., B.Sc.Ed., M.S.
Linda Zambolin, R.D.H., B.A.,
Assistant Professors
School of Dental Hygiene
Dalhousie University



Four recent studies* into relative toothbrush efficacy have proven the same thing. Jordan brushes best.

The Jordan V Soft. The Jordan V-tufted soft-bristle toothbrush was found to be the most efficient of all brushes tested in terms of plaque removal, particularly in interproximal margins.

V-Tufted Brushes. V-tufted toothbrushes were found to

remove plaque more effectively than straight-cut multitufted toothbrush designs.

Soft Bristles. Soft-bristle brushes remove plaque better than firmer textures, particularly when vertical brushing motions are used.

Time Spent Brushing. Not surprisingly, plaque removal was found to increase with time spent brushing.

Brushing Pressure. Also confirmed was that plaque removal is significantly enhanced with increased pressure of brushing.

Jordan

Designed to reach where other brushes can't.

*Yankell, S.L., U Pa Sch Dent Med, Phila, Penn IADR Journal of Dental Research, Jan 79, Vol. 58, P. 239, Abstr 585
Nygaard-Østby, P., et al, Jordan as Oslo, Norway; U Pa Sch Dent Med, Phila, Penn.
Bergenholtz, A., Dept Periodont, U Umea, Umea, Sweden.
Yankell, S.L. et al, U Pa Sch Dent Med, Phila, Penn.

FOR FURTHER INFORMATION, OR TO ORDER PROFESSIONAL SUPPLIES, WRITE TO: "THE JORDAN TOOTHBRUSH" C/O FRANK W. HORNER INC. P.O. BOX

HORNER

Attitude of Canadian Dental Hygienists Toward Mandatory Continuing Education

Margery G.E. Forgay, Dip. D.H., B.Ed., M.A.

Introduction

In relation to the health professions, continuing education is described as that occurring after basic preparation for practice is completed, and which has a bearing on the delivery of services to the public. This education may be for credit or non-credit, formal or informal, planned or incidental, self- or other-directed.¹

Practice in many health professions is limited to those who are registered, certified, or licensed by governments or their agents. Avoiding obsolescence is regarded as a prime responsibility of the health professional; continuing education is essential to avoid obsolescence. Presumably, all members of health professions need continuing education.

In recent years, there has been an increasing trend for members of health professions to provide proof of participation in a specified amount and type of continuing education to maintain credentials necessary for practice, and it is anticipated that the trend will continue.^{2,3} Dentistry has tended to lead the trend toward mandatory continuing education.⁴ At present, several provinces and states require continuing education for dentists, and more have the matter under consideration.

Ten states have continuing education requirements for relicensure of dental hygienists.⁵ In Canada, British Columbia and Saskatchewan have instituted such requirements.⁶

Mandatory continuing education is an issue of considerable current interest and the subject of journal articles, surveys, editorials, conferences, and legislation. A wide range of attitudes concerning mandatory continuing education appears to

exist. There are, however, few research studies dealing directly with attitudes toward mandatory continuing education. In particular, there are no reports in the literature on possible demographic or other influences affecting attitude toward mandatory continuing education, although demographic characteristics of hygienists and participation rates in continuing education have been investigated.^{7,8}

Mandatory continuing education entails commitments of large sums of money, educational resources, increased administration and record keeping, difficult decisions concerning who will prescribe the amount and type of education required, difficulty for many individuals in conforming to requirements, and a basic change in the philosophy of the voluntary nature of continuing education for health professionals. In view of these significant implications, it is surprising that research concerning the nature and determinants of attitude toward mandatory continuing education has not been undertaken. If these can be ascertained, understanding of this controversial, sometimes emotional issue will be enhanced.

This study was designed to investigate the following questions:

1. Does attitude toward mandatory continuing education in a group of Canadian dental hygienists reflect a single general predisposition, or are there several underlying factors?
2. To what extent is attitude toward mandatory continuing education influenced by demographic and other factors, such as: remoteness from dental hygiene education centres; years since graduation; program of graduation; increased educational achievement; involvement in professional dental hygiene or

ganizations; career participation; participation in continuing education; involvement with mandatory continuing education; age; marital status; sex; size of community of residence; number of children; and general conservatism?

Methods

In order to measure attitude toward mandatory continuing education, a 13-item scale was constructed. The items were constructed to measure differences in attitude toward and anticipated results of mandatory continuing education. A seven point scale was used: strongly disagree, moderately disagree, mildly disagree, neutral, mildly agree, moderately agree, and strongly agree. Scores of from one to seven were assigned according to the scale. Several items (numbers 2, 5, 7, 10 and 11) were constructed for reverse scoring. The items included in the scale were:

1. Continuing education should be mandatory for all dental hygienists.
2. Dental hygienists who teach in dental auxiliary programs should be exempt from mandatory continuing education requirements.
3. Prestige of dental hygiene will grow under a system of mandatory continuing education.
4. Continuing education should not be mandatory for hygienists living in remote areas.
5. Continuing education should be mandatory only if employers would be required to give time off with pay for continuing education.
6. Under a system of mandatory continuing education, serving on a provincial or national dental hygiene association executive should qualify as a form of continuing education.
7. Dental hygienists who have graduated within three years should be exempt from mandatory continuing education requirements.
8. Mandatory continuing education will increase competence in dental hygiene practice.
9. Mandatory continuing education for dental hygienists should be written into legislation, not just in by-laws governing dental hygiene practice.
10. Learning is an internal, voluntary process, therefore mandatory continuing education is wrong in principle.
11. Dental hygienists generally participate in enough continuing education to meet their need to remain abreast of developments.
12. Where it has been tried, mandatory continuing education works well.
13. If continuing education were mandatory, dental hygienists would appreciate their career more.

In order to see if scores for the 13 test items might reveal different components or dimensions

of attitude toward mandatory continuing education, factor analysis was undertaken. Three factors, or underlying dimensions, were identified and these were examined separately.

It was surmised that attitude toward mandatory continuing education would be influenced by several types of variables such as level of education, years since graduation, and involvement with professional dental hygiene organizations.

A panel of 20 dental hygienists from across Canada was asked to list all factors they felt had influenced their attitude toward mandatory continuing education. The panel also assisted in ranking offices in provincial and national dental hygiene organizations to provide a seven point scale for involvement in professional organizations. The panel responses, together with some a priori selections of the investigator, were used to construct a questionnaire to determine the effect of demographic variables, career participation, professional organization involvement, participation in continuing education, and experience with mandatory continuing education. In addition, to see if psychological variables might affect attitude toward mandatory continuing education, one psychological dimension (conservatism) was examined. The measure used for conservatism was the Conservatism Scale devised by Wilson.⁹

Data was obtained from a survey sampling all dental hygienists licensed to practise in the ten provinces of Canada. The list of these hygienists, which included 1638 members of CDHA and 1498 non-members, was obtained through the courtesy of CDHA. Questionnaires were sent to every sixth name from each of the member and non-member groups, and a follow-up reminder was sent to non-respondents after five weeks. Five hundred and twenty-two hygienists were surveyed. The response rate was 60.8 per cent.

Results

As expected, respondents were almost all young (average age 27.5 years, S.D. 5.5) and female. The average hygienist had graduated six years ago and worked as a dental hygienist for five years. Seventy-one per cent graduated from university based programs, and 80 per cent were employed at the time of the survey. Seventy per cent of respondents were CDHA members, although 73 per cent had never held a provincial or national office. Twenty-eight per cent reported not having attended any continuing education program in the twelve months prior to the survey.

The Mandatory Continuing Education (MCE) Score indicating the degree of favourableness toward mandatory continuing educating was obtained by summing the scores for the 13 items of the scale.

The average MCE Score was 61 (S.D. 11) indicating the average respondent to be mildly in favour of mandatory continuing education. The low standard deviation indicates a fair degree of agreement among respondents.

Factor analysis of the 13 item scores revealed three major factors. For Factor I, accounting for 32.7 per cent of MCE Score variance, the high loading (correlating) items indicated a belief that mandatory continuing education will increase the prestige, competence, and appreciation of dental hygiene as a profession. This factor was labelled Professional Enhancement.

High loading items for Factor II indicated belief that hygienists in remote areas should be exempt from mandatory continuing education requirements, that hygienists already participate in enough continuing education to meet their needs, and that learning is an internal voluntary process and should not be mandated. This factor, labelled Voluntariness, accounted for 10.7 per cent of variance in MCE Scores.

Two scale items loaded highly on Factor III: belief that dental auxiliary educators should be exempt from mandatory continuing education, and that recent graduates should also be exempt. These indicate a belief that dental hygiene programs are up to date in content, and Factor III, accounting for 8.7 per cent of MCE Score variance, was labelled Program Currentness.

MCE Scores were found to be significantly and positively correlated with the following variables: miles from nearest dental hygiene school*, CDHA membership***, number of professional meetings attended in the past twelve months*, offices held in provincial or national organizations*, per

cent of employed years worked full time*, number of continuing education programs attended in the past twelve months**; living in a province where continuing education is mandatory for hygienists**, and living in a province where continuing education is mandatory for dentists***.

Scores for Factor I, Professional Enhancement were significantly and positively correlated with miles from nearest dental hygiene school*, CDHA membership*, number of meetings attended in the previous twelve months*, offices held in provincial or national association*, per cent of employed years worked full time*; number of continuing education programs attended in the previous twelve months*, having attended a meeting or discussion on the topic of mandatory continuing education**, living in a province where continuing education is mandatory for hygienists**, and living in a province where continuing education is mandatory for dentists**. Professional Enhancement was negatively correlated with the size of the community where the respondent resided*.

Factor II, Voluntariness, showed significant negative correlations for many variables which were positively correlated with Professional Enhancement. These were distance from nearest dental hygiene program*, CDHA membership*, number of professional organization meetings attended in the previous twelve months*; offices held in provincial or national dental hygiene organization*, per cent of employed years worked full time*; number of continuing education programs attended in the twelve months**, living in a province where continuing education is mandatory for dental hygienists***; living in a province where continuing education is mandatory for dentists*.

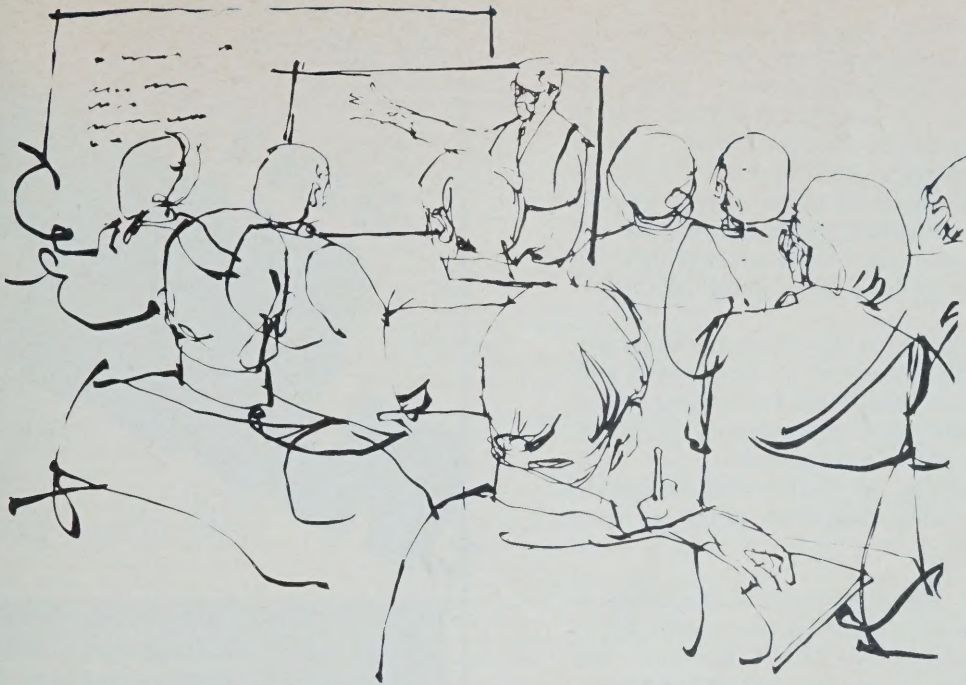
Factor III scores, indicating a belief in Program Currentness, showed significant positive correlations with number of years since graduation*, number of children**, age**, and graduation from a university based program*. This factor was negatively correlated with living where continuing education is mandatory for dentists*.

Several variables examined showed no significant correlation with MCE Scores, or scores for any of the three major factors identified. These variables included miles distant from the nearest dental faculty; level of education attained; number of national conventions attended in the past five years; number of years employed as a dental hygienist; current employment in dental hygiene hours per week worked; teaching experience; part-time teaching; presentation of a continuing education program; marital status; field of employment; and general conservatism. Cell numbers of two variables, sex and single parent status were too low to permit analysis.



522 hygienists were surveyed. The average respondent was mildly in favour of mandatory continuing education.

* $p < .05$, ** $p < .01$, *** $p < .001$



One factor that correlated highly with a favourable attitude to mandatory continuing education was the belief that mandatory continuing education will increase the prestige, competence, and appreciation of dental hygiene as a profession.

Discussion

The multidimensional nature of attitudes to mandatory continuing education is consistent with its recent emergence as an issue for health professionals. The issue is complex, and it is likely that attitudes have not had sufficient time to become well established. Some of the factors making up the MCE Scores clearly reflect arguments for or against mandatory continuing education. For example, mandatory continuing education may be used as a tool to develop the cohesiveness and therefore the power of a professional group. It can be regarded as an instrument to enhance the prestige, competence, and appreciation for the affected profession. This feeling is reflected in Professional Enhancement. Voluntariness, on the other hand, taps the conviction that continuing education for health professionals should be essentially a voluntary activity, engaged in willingly because of its intrinsic value, and if unimpeded, hygienists will voluntarily participate in as much continuing education as they need.

At present the combined result of the different dimensions of attitude toward mandatory continuing education produces a mean attitude slightly in favour of mandatory continuing education, and most scores lie fairly close to the mean. Future events and circumstances may influence the different dimensions of attitude unequally, producing a shift in overall attitude, and a change in the salience of

one or more of the factors. The development of dental hygiene as an emerging health profession and the influence of jurisdictions in which continuing education is mandatory could produce attitudes favouring mandatory continuing education. This shift will be enhanced by the fact that at present, leaders in the profession (as defined by the levels of offices held) are more likely to favour mandatory continuing education.¹⁰

Where mandatory continuing education is established in Canada, an important issue will be who is to control decisions about how much and what kind of continuing education is required. The body in which these powers is vested will have a great deal of control over hygienists. Will hygienists themselves be empowered to make these decisions, or will education be prescribed by dentists?

Examination of the effects of different independent variables reveals some social and demographic variables which influence attitude toward mandatory continuing education. These correlations, however, tend to be low, and the variables concerned either separately or together account for a fairly small proportion of the variance in scores. This is to some extent an encouraging result, since it means that the issue has a better chance of being decided upon its merits rather than being greatly influenced by such variables.

The lack of either a positive or negative correlation between MCE Scores and conservatism scores

is similarly significant, since it means hygienists are not predisposed by their position along the psychological dimension of conservatism/liberalism to view the issue in a certain way. It would be interesting to discover whether other identified psychological dimensions are similarly free of relationships to attitudes toward mandatory continuing education. Perhaps, because this is a recent issue, it is still relatively free from influences related to general psychological characteristics.

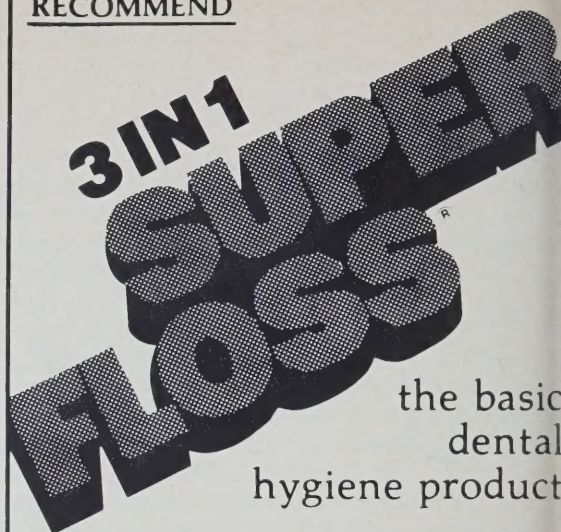
The relative inability of any of the demographic and other variables selected to significantly predict attitude toward mandatory continuing education or any of the major components of that attitude raises an intriguing question: Are there other variables which do predict attitude toward mandatory continuing education, and if so, what are they?

About the author: Margery Forgay is a Professor at the School of Dental Hygiene, University of Manitoba and the CDHA Chairman of the Continuing Education Committee.

References

1. Stuart, C.T. Mandatory continuing education for relicensure in nursing. *Journal of Continuing Education in Nursing*, 6(5): 5-17, 1975
2. Pearlman, S. Mandated continuing education: weathervane for the lifetime of the professional? *International Journal of Continuing Education and Training*, 3: 185-191
3. Derbyshire, R.C. Relicensure, mandatory continuing education, and the state regulatory agency. *Proceedings: Mandatory Continuing Education, Prospects and Dilemmas for Professionals*. D.E. Moore, Ed. University of Illinois, Urbana-Champaign, Feb. 1976
4. Strother, G.B. and Swinford, D.M. Recertification and relicensure - implications for the university. *National University Extension Association Spectator* 39(19): 5-9, 1975
5. American Dental Association: Dental hygiene licensure (1979)
6. British Columbia Dental Hygienists' Association Newsletter, Jan. 1979: 2-5
7. Kline, C. Participation in continuing education by employed dental hygienists in British Columbia. M.A. Thesis, Adult Education Research Centre, University of British Columbia, 1975
8. Malvitz, D.M. and Judge, S.P. Correlates of reported participation in continuing education. *Dental hygiene* 50: 543-546, 1976
9. Wilson, G.D. *The Psychology of Conservatism*, Academic Press, London, 1973
10. Kanekar, S. Observational learning of attitudes: a behavioural analysis. *European Journal of Social Psychology* 6(1): 5-24, 1976

RECOMMEND



THREADER

FILAMENT BRUSH

UNWAXED FLOSS

SUPER FLOSS provides both a floss and a special filament brush for removal and clearance of plaque and food debris from interproximal spaces. *Removal and clearance* of plaque and food debris are the complementary elements of maximum efficacy.

**Now clinically proven
superior to regular
dental floss by leading
American and
European University —
Dental Schools**

The SUPER FLOSS filament brush is constructed of 204 tiny nylon filament "springs". These filament springs become straight and parallel with either elongation or lateral forces. The result is a brush that can compress down to the diameter of the floss section in order to clear out smaller interproximal spaces. The filament springs automatically revert to a coiled state when relaxed. The result is a brush with a "memory" characteristic and allows for repeat usage and good durability.

PROFESSIONAL PRICE LIST

Patient Pack - \$119.00 - 144 instruction printed poly bags of 30 cleaners each (4320 cleaners)

Pro-Pack - \$21.95 - 2 poly bags of 500 cleaners each.

Now available at drug stores. Patients can order directly by mail.



marpo-dent products

10569 - 111 Street,
Edmonton, Alberta. T5H 3E8
Phone (403) 426-3720

Directory 1981 - 1982

EXECUTIVE COUNCIL:

PRESIDENT: Patricia Grant, 3 Linden Lane, Halifax, Nova Scotia B3R 1N1. Res. (902-477-9876) Bus. (902-453-4761).

PRESIDENT ELECT: Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ontario L4W 2B7. Res. (416-624-3495).

FIRST VICE-PRESIDENT: Mary Pellitier, Box 18, Site 5, R.R. 7, Moncton, New Brunswick E1C 8Z4. Res. (506)-384-8728).

SECRETARY: Peggy Larder, 6150 Regina Terrace, Halifax, Nova Scotia B3H 1N5. Res. (902-429-4166) Bus. (902-424-2279).

TREASURER: Debbie Mitton, 93 Chandler Drive, Lower Sackville, Nova Scotia B4C 3C6. Res. (902-865-5626). Bus. (902-429-0479).

IMMEDIATE PAST PRESIDENT: Margaret Bailey, Box 2228, Kindersley, Saskatchewan S0L 1S0. Res. (306-463-2397). Bus. (306-463-4661).

THE BOARD OF DIRECTORS:

BRITISH COLUMBIA: Yvonne Smith, R.R. 2, Gartley Beach, Courtenay, B.C. V9N 5M8. (604-338-6470); Marie Goldfinch, 46274 Princess Ave. East, Chilliwack, B.C. V2P 2A9 (604-792-3156); Sue Sumi, 7077 - 18th Ave., Burnaby, B.C. V3N 1G9 (604-521-5184); Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).

ALBERTA: Laura Mowat, 11424-161 Avenue, Edmonton, Alberta T5X 2L1. (403-456-0977); Winnied MacDonald, 72 Colleen Cres., S.W., Calgary, Alta. T2V 2R3 (403-253-6178).

SASKATCHEWAN: Barbara Ferris, 5107-222 Clairmont Drive, Saskatoon, Saskatchewan S7M 4P5 (306-382-3348).

MANITOBA: Gladys Stewart, 454 Niagara St., Winnipeg, Man. R3N 0V5. (204-453-1574).

ONTARIO: Judy Barnes, 74 Keewatin Avenue, Toronto, Ontario M4P 1Z8. (416-481-7507); Linda McCance, 5027 Wixon Street, Clairmont, Ontario H1 1S0. (416-649-2056); Ailsa Wood, 505-160 Balmoral Avenue, Toronto, Ontario M4V 1J7. (416-923-6669); Rosemary Arseneault, 92-B McDougall Rd., Waterloo, Ontario N2L 5C5. (519-884-4216); Dale Scanlan, 53 Ariel Court, Nepean, Ont. K2H 8J1 (613-28-7962); Linda Perron, 712-101 Governor's Road, Dundas, Ontario L9H 6L7. (416-627-7193); Susan Ferroux Knox, 3558 Dawson Road, Thunder Bay, Ontario. (807-767-1358); Carolyn Roth, 184 Greenbrook Drive, Kitchener, Ontario. N2M 4J7 (519-45-6664); Lise Thom, Box 293, Russell, Ontario. 0A 3B0 (613-445-2892); Fern Waldman, 2008-3303 Jon Mills Road, Willowdale, Ontario. M2J 4T6 (416-493-1811).

QUEBEC: Lucie Billette-Raychat, 4641 Cumberland Street, Montreal, Quebec H4H 2L5.

NEW BRUNSWICK: Trudy McAvity, Box 947, Rothesay, N.B. E0G 2W0 (506-847-5502).

NOVA SCOTIA: Peggy Larder, 6150 Regina Terrace, Halifax, N.S. B3H 1N5 (902-429-4166); Lisa MacDonald, 3450 St. Andrews Avenue, Halifax, N.S.

PRINCE EDWARD ISLAND: Jean MacLean, 6 Newland Crescent, Charlottetown, P.E.I. C1A 4H5 (902-34-3294).

NEWFOUNDLAND: Ingrid Curtis, 67 Roche Street, St. John's Nfld. A1B 1L9 (709-722-1603).

CIAL COMMITTEE CHAIRMEN:

CONTINUING EDUCATION: Marnie Forgy, 780 Lianatynne Ave., Winnipeg, Manitoba R3E 0W3 (204-786-3683).

EDUCATION: Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2C4 (204-889-4890).

FINANCE: Debbie Milton, 93 Chandler Drive, Lower Sackville, Nova Scotia. B4C 3C6.

STUDENT MEMBERSHIP: Cara Tax, 883 Campbell Street, Winnipeg, Manitoba R2Y 1C1 (204-89-6372).

POINTIVE OFFICERS:

EXECUTIVE SECRETARY: Thora Appelt, 2136 Fillmore Crescent, Ottawa, Ontario K1J 6A4. (614-64-6455).

EDITOR: Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2 (519-254-6624).

BOOKKEEPER: Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (416-923-1669).

EXECUTIVE APPOINTMENTS:

• **SPEAKER FOR THE BOARD:** Ms. Joanne Clovis, #1-14310-80 Street, Edmonton, Alberta T5C 1L6. (403-476-6596).

• **CONVENTION CHAIRMAN:** 1982: Maureen Donoghue, 1904-57 Charles St. West, Toronto, Ont. M5S 2X1. (416-925-7506).

• **A.C.F.D. DENTAL HYGIENE SECTION:** Kate MacDonald, 3914 Novalea St., Halifax, N.S. B3K 3G7 (902-445-8868).

• **DENTAL AUXILIARY LIAISON OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Saskatchewan S4T 1L6. (306-569-1603).

• **INTERNATIONAL LIAISON CHAIRMAN:** Sharon French, 39 Chinook Cres., Nepean, Ontario K2H 7C9. (613-820-1196).

• **DATA BANK REPRESENTATIVE:** Pat Johnson, Oak Deane, R.R. No. 2, Aurora, Ontario L4G 3C8. (416-727-1433).

• **CDA COUNCIL ON HEALTH CARE:** Kate MacDonald, 3914 Novalea St., Halifax, N.S. B3K 3G7. (902-445-8868).

• **CDA COUNCIL ON EDUCATION:** Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4. (204-889-4890).

• **CSA TECHNICAL COMMITTEE ON DENTISTRY:** Anne Bosy, 1529 Ballyclare Drive, Mississauga, Ontario L5C 1J4. (416-270-4019).

• **OFFICER OF CDHA ORGANIZATION AND PROCEDURES:** Marjorie Dimitri, 1606 Ayleslynn Drive, North Vancouver, B.C. V7J 2T3. (604-987-7392).

• **PORTABILITY OFFICER:** Elaine Good, 262 Anita Court, Waterloo, Ontario.

STANDING COMMITTEES:

MEMBERSHIP:

• **CHAIRMAN:** Jo Gardner, 1125 West 54th Ave., Vancouver, V6P 1N3. (604-261-8642).

• **B.C.:** Casseda Parsons, 1049 West Keith Rd., North Vancouver, B.C. V7P 1Y6. (604-986-4620).

• **Alta.:** Linda Ewanovich, 128 Glenpatrick Dr., S.W., Calgary, Alta. T3E 4L6. (403-242-3465).

• **Sask.:** Darlene Armstrong, 43-35 Centennial St., Regina, Saskatchewan S4S 6P8. (306-586-9457).

• **Man.:** Darlene Armstrong, 43-35 Centennial St., Regina, Sask. S4S 6P8.

• **Ont.:** Kathleen Feres-Patry, 10C Stonehill Crt., Kanata, Ont. K2M 1G2. (613-592-5934).

• **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-3743).

• **N.B.:** Jean McGinis, 112 Marianne Dr., Rothesay, N.B. E0G 2W0. (506-849-2240).

• **N.S.:** Diane Dobson, Chester, Nova Scotia.

• **P.E.I.:** Florence Wall, Mt. Herbert, R.R. 5, Charlottetown, P.E.I. C1A 7J8. (902-569-2079).

• **Nfld.:** Coleen Thomey, 257 Lemarchant Rd., St. John's, Nfld.

MANPOWER AND UTILIZATION:

• **CHAIRMAN:** Jenny Thomas, 2759 Salina Street, Ottawa, Ont. K2B 6P8. (613-820-0405).

• **B.C.:** Randy McIlraith, 1201-2015 Nelson St., Vancouver, B.C. V6G 1N6.

• **Alta.:** Ila Seabrook, 54 Woodlake Cres., Sherwood Park, Alta. (403-467-1730).

• **Sask.:** Bev Upton, 143 Bothwell Cres., Regina, Sask. S4R 5Y7. (206-545-7563).

• **Man.:** Ruth Konzelman, 105 Olivier Ave., Selkirk, Man. R1A 0C4. (204-482-6112).

• **Ont.:** Jenny Thomas, 2759 Salina Street, Ottawa, Ontario K2B 6P8. (613-820-0405).

• **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5. (514-486-3743).

• **Sask.:** Maureen Bowerman, 51 Huron Place, Saskatoon, Sask. S7K 4E8. (306-664-3087); Sharon McLean, 1400 Argyle St., Regina, Sask. S4T 3S1. (306-525-3289).

• **Man.:** Margaret Geisbrecht, 20 Ruby St., Winnipeg, Man. R3G 2C8. (204-772-5010).

• **Ont.:** Cheryl Barrett, 238 Hodgson Dr., Newmarket, Ont. L3Y 1E2. (416-895-8440).

• **Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1. (514-352-6245).

• **N.B.:** Barbara Ash, Dept. of Health, P.O. Box 93, St. John, N.B. E2L 3X1. (506-658-2531).

• **P.I.E.:** Pat Stewart, Travellers Rest, Summerside, P.E.I. (902-436-2709).

• **Nfld.:** Lois Bowden, 189 LeMarchant Rd., St. John's, Nfld. A1C 2H5. (709-579-3259).

NOMINATIONS:

• **CHAIRMAN:** Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ont. L4W 2B7. (417-624-3495).

• **B.C.:** Evelyn McNee, 1509 Lynn Valley Rd., North Vancouver, B.C. V7J 2V1. (604-987-2821).

• **Sask:** Barb Long, 2741 Presters Rest, Saskatoon, Sask. S7G 3G2. (306-373-7434).

• **Man.:** Kim Harrot, 658 Government Ave., Winnipeg, Man. R2K 1X2. (514-667-0831).

• **Ont.:** Dale Scanlan, 53 Ariel Ct., Nepean, Ont. K2H 8J1. (613-828-7962).

• **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5. (514-486-3743).

• **N.B.:** Pam Mosher, 1064 Salisbury Rd., Moncton, N.B. E1E 3V6. (506-855-2815).

• **N.S.:** Yolanda Bresolin, 16½ Roche St., Truro, N.S. B2N 3W1.

• **P.E.I.:** Jean MacLean, 6 Newland Cres., Charlottetown, P.E.I. C1A 4H5. (902-894-3294).

• **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9. (709-722-1603).

CONSTITUTION:

• **Chairman:** Mary Pellitier, Box 18, Site 5, R.R. 3, Moncton, New Brunswick E1C 8Z4 Res. (416-624-3495).

• **B.C.:** Yvonne Smith, R.R. 3, Gartley Point Road, Courtenay, B.C. V9N 5M8 (604-338-6470).

• **Alta.:** Marg Wilson, 8739-67 Ave., Edmonton, Alta. T6J 0E3 (403-434-0925).

• **Sask.:** Joan Foster, 545 Laurier Drive, Swift Current, Sask. S9H 1L3 (306-713-8754).

• **Man.:** Louise Dufault, 82 Reil St., Winnipeg, Man. R2M 2M5 (204-256-9115).

• **Ont.:** Jasmine Holetich, 1871 King E., Hamilton, Ont. L8K 1V1 (416-549-5048, 525-9140).

• **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-3743, 937-0511).

• **N.B.:** Sue Breen, Castle Acres, Comp. 28, S.S. 3, Fredricton, N.B. (506-855-2815).

• **N.S.:** Linda Zambolin, 114 Regal Road, Dart. N.S., B2W 4H8 (902-434-8983).

• **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).

• **P.E.I.:** Debbie Richard, 19 Milbrooke Dr., Charlottetown, P.E.I. C1A 7V2 (902-569-4490).

PROVINCIAL NEWSLETTER EDITORS

• **B.C.:** Pat Bowman, 926 W. 22nd Ave., Vancouver, B.C. V5Z 2A1. (604-736-0962).

• **Alta.:** Adeline Fioriolo, 8911-138 Ave., Edmonton, Alta. T5E 2A7.

• **Sask.:** Teri Gottselig, 98 Lockwood Rd., Regina, Saskatchewan S4S 3G2. (306-525-5136).

• **Man.:** Joanne Presunka, 1041 Howard Ave., Winnipeg, Manitoba R3T 1S1. (204-284-7433).

• **Ont.:** Jane Rogers, 10 Lyle Place, Kitchener, Ontario N2B 2J6. (519-576-3718).

• **Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1. (514-352-6245).

• **N.B.:** Nancy Mills, 20 Wilson Rd., Riverview, N.B. E1B 2V8. (506-386-3734).

• **N.S.:** Diane Forrest, 209-7 Parker St., Dartmouth, N.S.; Cindy Forward, Oyster Pond, Jeddore, N.S.

• **Nfld.:** Pam Vokey, P.O. Box 205, Gander, Newfoundland A1V 1W6.

• **P.E.I.:** Frances Pierce, 3 Sunset Drive, Charlottetown, P.E.I. C1A 3J6.

MINISTRY OF HUMAN RESOURCES DENTAL HYGIENIST

Competition K81:1858A \$20,784 - \$23,808
At Tranquille, (near Kamloops), establish and maintain dental program; provide technical services; provide program of instruction to develop and implement dental care program including lectures, demonstrations, consultations to direct care staff, parents, foster parents, group home operators, etc.; inspect dental hygiene of persons served by Tranquille with referrals to dentist; co-ordinate with Resident Life staff for visits of podiatrist and orthotist; other related duties.

Qualifications — Diploma in dental hygiene or equivalent; registration and license as Dental Hygienist in B.C.; preferably some experience subsequent to graduation.

Return applications
IMMEDIATELY.



**Province of British Columbia
Public Service Commission**

Positions
are open to both
men and women.
Canadian citizens are given
preference. Obtain applications
from, and return to address below

544 Michigan Street, Victoria, B.C., V8V 1S3

INDEX TO ADVERTISERS

IFC	Dentsply International
77	John O. Butler
80	Colgate Palmolive
87	Hu Friedy
89	Horner
94	Marpo-Dent
IBC	Dept. of National Defence
OBC	Proctor and Gamble

Answer Key:

1. a - 1 & 3; b - 7, c - 4, d - 6, e - 2, f - 5; 2. d; 3. d;
4. e; 5. d; 6. F; 7. T; 8. F; 9. F; 10. F.

DENTAL HYGIENISTS LOCAL BOARD OF HEALTH DENTAL DIVISION

Applicants are invited from Dental Hygienists to join the Calgary Health District Dental Division, as an important member of a highly qualified Dental Team working to improve the health of the community.

ACTIVITIES:

- A. Health Education - includes working in close liaison with dentists, public health nurses, teachers and parents.
- B. Administration - includes record keeping, compilation of records, control of supplies and other office duties.
- C. Technical Activities - includes dental inspection and referral of children, dental prophylaxis and topical fluoride therapy.
- D. Community Relations - includes activities with other agencies and organized local groups or committees.

QUALIFICATIONS: The candidate must have a University Diploma in Dental Hygiene or equivalent. Registration in Alberta is also a requirement.

The ability to work as a cohesive member of a team and a genuine interest in serving people are definite requirements.

SALARY: Negotiable depending on qualifications and experience.

FRINGE BENEFITS: Include medical, dental, and group life coverage. Four weeks annual vacation after one year's service, plus other excellent employee benefits.

For further information and application forms qualified applicants are invited to contact, in **confidence**:



Director,
Dental Health Services
Local Board of Health
Union Centre Bldg.
(2nd floor)
120 - 17th Ave. S.W.
Calgary, Alberta T2S 2T2
Phone:
(403) 269-8800 (L231)

Dental Hygienists

Get the facts now
about the challenge and
opportunity of a
Canadian Forces career.

If you have successfully completed a community college program and have certification as a Registered Dental Hygienist, you may join the Canadian Armed Forces.

The Canadian Forces offer steady employment, accelerated promotion, modern equipment, good income, fringe benefits, and a rewarding career.

Join the proud people serving all across Canada and overseas. For more information, visit your nearest recruiting centre, or mail the coupon below. You can also call us collect. We're in the Yellow Pages under "Recruiting".



THE CANADIAN ARMED FORCES.

Canada

The career with a difference.

Director of Recruiting & Selection
National Defence Headquarters
Ottawa, Ontario K1A 0K2

I am interested in dental hygiene career opportunities in the Canadian Forces.

Name _____ Tel. _____

Address _____

City _____ Prov. _____ Postal Code _____

Major new clinical evidence shows...

Crest has achieved a major step forward in its anticaries protection

DENTAL LIBRARY
UNIVERSITY OF TORONTO
124 EDWARD ST.
TORONTO
ONTARIO, CANADA

JUN 17 1981

New Improved Formula Crest, with sodium fluoride in a silica abrasive system, significantly more anticaries protection than previous Crest. These results were demonstrated in the largest dentifrice study ever published! A major study² also demonstrated improved anticaries effectiveness of the new formula.

This product has been pH-stabilized and formula-balanced to provide more fluoride to react with tooth enamel. For further information please write to: Mr. H. R. Hamilton, Dental Services Division, P.O. Box 355, Station "A," Toronto M5W 1C5.

Improved protection from tooth decay
Improved Formula Crest

New Improved
Formula Crest 40.7%

Previous
Crest 23.4%

Herl, W. A., "Clinical Evaluation of a Sodium Fluoride-Silica Abrasive Dentifrice," *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.
Swanger, B. B., Gish, C. W. and Mallatt, M. E., "Effect of a Sodium Fluoride-Silica Abrasive Dentifrice Upon Caries," *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

NEW! IMPROVED FORMULA!
Crest
for even better anticaries
protection within your
preventive program

† "Crest contains sodium fluoride which is, in our opinion, an effective decay preventive agent, and is of significant value when used in a conscientiously applied program of oral hygiene and regular professional dental care."

the canadian dental hygienist

l'hygieniste dentaire du canada

SPRING 1982 PRINTEMPS

VOLUME 16, NO. 1

April is Dental Health Month





DENTAL HEALTH A TEACHER'S GUIDE K-12

Prepared by Health & Welfare
Canada

H39-50/1981E

\$4.95

Dentists, dental hygienists and others interested in dental health education in schools should become familiar with the concepts presented in this guide.

The dental topics covered address five dental health themes:

- Teeth and their functions.
- The role of dental plaque in dental disease.
- Methods of personal care of the teeth and gums.
- Professional care of the mouth.
- The community and its role in dental health.

To order, write:

Canadian Government Publishing Centre
Supply & Services Canada
Ottawa, Canada K1A 0S9

Orders must be prepaid by money order or cheque made payable to the Receiver General for Canada.

La santé dentaire:

guide pédagogique de la
maternelle à la fin du secondaire

Préparé par Santé et Bien-être
social Canada

H39-50/1981F

4,95\$

Les concepts avancés dans ce guide devraient devenir familiers aux dentistes, aux hygiénistes dentaires et à tous ceux que l'éducation en santé dentaire du milieu scolaire intéressent.

La matière porte sur cinq grands thèmes associés à l'hygiène dentaire:

- Les dents — ce qu'elles sont et quelles sont leurs fonctions.
- Le rôle de la plaque dentaire dans les maladies dentaires.
- Les méthodes de soin personnel des dents et des gencives.
- Les soins professionnels de la bouche.
- La collectivité et son rôle en ce qui concerne l'hygiène dentaire.

Disponible du:

Centre d'édition du gouvernement du Canada
Approvisionnement et Services Canada
Ottawa (Canada) K1A 0S9

Les commandes sont payables à l'avance par chèque ou mandat fait à l'ordre du Receveur Général du Canada.



Supply and Services
Canada

Approvisionnement et Services
Canada

Canada

the canadian dental hygienist

l'hygieniste dentaire du canada

contents/contenu

articles/articles

A Comparison of the Effectiveness of Television vs Live Instruction for Teaching Flossing in the Classroom. Beverly Davis, C.D.A. and Guy Costanzo, B.Com. 12

The Efficacy of Professional Flossing in the Control of Gingival Health. Maureen A. Vercaigne, Dip. Dent. Hyg. and Shirley C. Gelskey, Dip. Dent. Hyg., B.S., M.P.H. 16

features/reportage

Comment: Deciphering the Supervision Jargon. Stephanie Nagle, Editor 5

Personal Finance. Suzanne Sheaves, R.D.H., B.A., M.B.A. 11

Self-Assessment Test 22

Alternatives: Consultant, Dental Health Services, Ministry of Health. Donna Gunther, R.D.H., B.Sc.D. . . 23

Book Review 30

departments/sections

Newsline 6 Classified Advertising . 29

Directory 1981-82 24 Letters to the Editor . . 29

Annual Index 28

the canadian
dental hygienist
l'hygieniste dentaire du canada

SPRING 1982 PHOTOMAPS VOLUME 16 NO. 1

April is Dental Health Month



staff/l'atelier

Editor/Redacteur en chef
Stephanie Nagle
2221 Victoria Avenue,
Windsor, Ontario N8X 1R2

Publisher/Editeur
Advertising Manager/
Gérant de la publicité
J.S. Woloschuk
Controlled Publications

Subscriptions Manager/
Gérant des abonnements
Controlled Publications
680 E.C. Row,
P.O. Box 1029, Station "A",
Windsor, Ontario

Advisors/Conseillers
Joan Voris, 3589 Osler Street,
Vancouver, B.C. V6H 1M3

Marjorie Dimitri
1606 Ayleslynn Drive,
Vancouver, B.C. V7J 2T3

Louise Gosemick
8078 De Lorimier,
Montreal, Quebec H2E 2P9



Member Publication

THE CANADIAN DENTAL HYGIENIST is the official journal of the Canadian Dental Hygienists' Association and is published quarterly.

All journal communications should be directed to the Editor, except subscription and advertising matters which should be addressed to the respective staff members.

Subscription rates for non-members are: \$15.00 per year in Canada and \$22.50 per year foreign. The opinions expressed in editorials or articles are those of the authors and do not necessarily represent the views of the Association, the Publisher or the Editor.

L'HYGIENISTE DENTAIRE DU CANADA est la revue officielle de l'Association des hygiénistes dentaires du Canada et est publiée à tous trois mois.

Toutes communications ayant trait à la revue devraient être adressées au Rédacteur en chef, à part les abonnements et tout ce qui concerne la publicité, ce qui, de leur côté, devraient être adressé aux membres du personnel respectifs.

Les tarifs d'abonnements pour les non-membres sont les suivants: \$15.00 par année au Canada et \$22.50 par année en pays étranger.

Butler®

*world's most
complete line
of professional
toothbrushes*

GUM

**There's a Butler brush
for every patient's needs!**

"Your Single Source"

Butler® offers more than 20 styles and sizes of toothbrushes. The G•U•M® line of brushes includes: Adult 3- and 4-row in nylon or natural, 3-row Youth and Child sizes in nylon, Sulcular, Travel Brush, and two new, compact Adult sizes for easy manipulation! Butler special-use brushes include: Proxabrush® system in 2 handles and 6 brush styles, Bass Right-Kind Sub-Orthodontic 3-row nylon, End-Tuft in 2 trim styles, Dent Brush, Bridge & Clasp Brush, and an Interdental Brush. Butler has a complete line of Preventive Aids, too. All available for your patients at better drug counters everywhere. Write for catalog and professional price list.

comment

Deciphering the Supervision Jargon

Sole practitioner, independent contractor, general supervision, direct supervision — new terms have cropped up in our vocabulary in the past few years bringing with them interesting implications to the future of dental hygiene practice.

Let's begin with the most familiar phrase — direct supervision. Direct supervision means that a dentist must be physically present in the office when a hygienist is performing any intra-oral duties. A dentist can not supervise a hygienist from down the hall or the next floor and, if the dentist is late, leaves early, or is on vacation, the hygienist is forbidden to do any intra-oral work. Hygienists in eight out of ten Canadian provinces practise hygiene under direct supervision of a dentist. (B.C. and Alberta are the exceptions. In Quebec, hygienists can perform a preliminary mouth exam and demonstrate oral hygiene instruction in a patient's mouth without a dentist's supervision.)

General supervision allows for the hygienist to treat patients on a prescription basis whereby the dentist diagnoses the case and prescribes a treatment plan for the hygienist, but the dentist does not have to be physically present in the office when treatment is delivered. This method of supervision has allowed hygienists in B.C. and Alberta to work in institutions that could not afford the services of a full-time dentist, although they must be supervised when administering local anaesthetic. Public health hygienists in all provinces working in units which deliver clinical services perform mouth exams, expose radiographs, do polishes, and apply fluorides on a prescription basis.

Sole practicing suggests that a hygienist opens her/his office and treats patients who not only do not have a prescribed treatment plan, but also have not necessarily been referred to her/him by a dentist. Patients would attend the hygienist's office for preventive care and the dentist's office for the remainder of their dentistry. One hygienist in Pennsylvania is working as a sole practitioner and has set up an office in her home. Another hygienist in Alberta is operating independently.

Independent contracting refers more to the financial arrangement between the hygienist and the dentist than to the method of supervision. Simply stated, a contract is drawn up between a dentist and hygienist specifying that the hygienist is responsible for the financial side of delivering preventive services, while the dentist remains ultimately responsible for the total dental care of the patient. The hygienist is paid directly by the patient and the hygienist pays her/his own overhead; eg., equipment, space, staff. The hygienist as employer instead of as employee is allowed more tax advantages.

Independent contracting is a legal arrangement in several states (Colorado, Florida, and California).¹ It has not yet been determined whether independent contracting would be legal in some Canadian provinces.

All arrangements raise questions that need to be answered, ideally by research rather than by argument. In evaluating each method of delivering care, we must give priority to the patients' needs. Does a patient want to travel to two separate offices to receive care? Will independent contracting keep preventive fees down? Is the institutionalized patient getting a fair shake in provinces requiring a dentist on the premises? Will a less stringent supervisory method allow for the delivery of more care to more people? Are hygienists capable of handling any medical emergency that may arise during treatment? Should the hygienist have extra training beyond the diploma level in order to work with less supervision?

At this point, we can only guess at the answers and hope that by the end of this decade, we will have gone beyond the defining stage and be fully immersed in the evaluating phase. □

1. Forrest, J., J. Rigolizzo, and N. Stackhouse. *Independent Practice: A Perspective for the Future*. *Dent Hyg* 55: 17-25, 1981.

Stephanie Eagle

newsline

Thomas accepts Manpower and Utilization post

A '63 graduate of England's School for Dental Therapists succeeds Elaine Good as our Manpower and Utilization Chairman. Jenny Thomas is shifting her focus to the nationwide manpower situation after chairing Ontario's Manpower and Utilization committee for the past two years. During this time, Mrs. Thomas assisted Mrs. Good in changing the Unemployment Insurance laws pertaining to part-time employees and in designing questionnaires to study Ontario salary and employment trends.

On coming to Canada in 1969, Mrs. Thomas discovered that her British qualifications were not recognized here. This influenced her to work as a dental assistant in a periodontal practice giving her a long-lasting interest in periodontology. During this time, she attended Carleton University and obtained a degree in Sociology. In 1977, Mrs. Thomas was able to take some challenge examinations which gave her a dental hygiene license. Since then she has been working 3-4 days per week as a hygienist and has been active in the Association.

"In taking over the national areas of Manpower and Utilization from Elaine," says Thomas, "I would like to acknowledge the hard work she has done. I know that she will find the position of Portability Chairman a challenging one, and I wish her the best of luck."

"I hope that much of my work will be preventive oriented so that we can adopt measures nationally that will not allow the problems that Ontario is facing to spread. I intend to work with Pat Johnson and the Data Bank to produce more regular and more up-to-date statistical information."

"I also hope that we can co-ordinate the Placement Services so that hygienists who are looking for work can obtain employment information more easily. If, in conjunction with this, we are able to change some portability regulations, it will facilitate movement around the country."

Thomas hopes that her term will be a productive one stating that we have a good national committee which works well as a team. She encourages input from anyone with ideas or problems. Write Jenny Thomas, 2759 Salina Street, Ottawa, Ontario K2B 6P8 (613) 820-4242.



Jenny Thomas began her work in Manpower and Utilization by managing a placement service for her local society. She now chairs the CDHA national committee.

Continuing education catalogue available

The CDHA continuing Education committee is compiling a catalogue of continuing education offerings across Canada. Information on each course includes title, goals and objectives, leader or presenter, sponsoring agency, and a contact for further information. Copies have been sent to all provincial dental hygiene organizations and schools of dental hygiene. Other groups such as community dental

hygiene societies, may receive catalogues free by writing:

M.G.E. Forgay, Chairman
C.D.H.A. Continuing Education Committee
School of Dental Hygiene
University of Manitoba
780 Bannatyne Avenue
Winnipeg, Manitoba
R3E 0S6

Former Health Minister endorses fluoridation

June 20, 1981 marked the thirty-sixth anniversary of the introduction of fluoride into the Brantford water supply to improve the dental health of its citizens. Now, 72% of Ontario residents on public water supplies enjoy the benefits of fluoridation.

Over the years fluoridation has proved to be the most effective and least costly public health measure to prevent dental delay. Extensive scientific research has uncovered no valid evidence that any health problem is caused or aggravated by drinking optimally fluoridated water.

Therefore, in accordance with the recommendations of the Canadian Dental Association I have no hesitation in stressing the importance of fluoridation for the early prevention of tooth decay and urging its adoption by municipalities, wherever feasible, as a safe, effective and well established public health measure.

Dennis R. Timbrell
Former Minister of Health

Community college hygiene program starts in B.C.

Douglas College is in the process of planning and developing a comprehensive dental auxiliary educational program to include three levels of Dental Auxiliary personnel as outlined in the Province of British Columbia's copsystem. The three levels of auxiliaries include Level I — Chairside Dental Assistant; Level II — Certified Dental Assistant; and Level III — Registered Dental Hygienist. All three levels of auxiliaries will have designated entrance and exit points.

The Level III program (Registered Dental Hygienist) will be the first such program to be offered in a Community college in British Columbia.

Ms. Wendy Halowski has recently been appointed to the position of Coordinator, Dental Auxiliary Program.

Deep Scaling and Curettage Course offered in Ottawa

During the fall of 1981, the Algonquin College Continuing Education Department of Health Sciences Ottawa, Ontario, held a ten-week, 36-hour course for Ontario licenced hygienists. The Course, "Deep Scaling and Curettage" was developed and directed by Mrs. Jenny Thomas, CDHA Manpower and Utilization Chairman. A local periodontist, Dr. Jean-Marc Vincent, helped direct and supervise the course.

Through her dental hygiene placement service, Mrs. Thomas received feedback from hygienists seeking employment who wished to practise high standards of dental hygiene which included advanced periodontal instrumentation. Mrs. Thomas wished to share with these and other hygienists her philosophy of dental hygiene practice, her ideas on establishing sanative, maintenance, and recall phases in general and perio practices, and a review of the techniques of deep scaling and curettage.

Clinical demonstrations were given by periodontists, Dr. J. M. Vincent and Dr. Eric Freeman, who also presented a lecture on recent clinical findings, theories, and research and on techniques in periodontal therapy.

Through discussion groups, course participants established or reaffirmed their philosophy of periodontal treatment. Participants established or reaffirmed their confidence in the technical aspects of deep scaling, root planing, and curettage through seminars and practical sessions. Patients were evaluated at the beginning and the end of the course by the periodontist. Discussions were held with employers regarding office management, dental hygiene practice, appointment booking, and sanative, maintenance, and recall phases of periodontal cases.

On behalf of the participants, I wish to thank Mrs. Thomas for her dedication and efforts in developing this unique program. It gave practising hygienists the opportunity to gain valuable knowledge in the management of periodontal cases.

Vivian McGuire
R.D.H., B.Sc.D.

CDA Library Offers Services to Hygienists

The Canadian Dental Association recently employed Ms. Margo Beres to oversee their library full-time. She will be updating the books available for loan by arranging new acquisitions and cataloguing the books already in the library.

The library will loan you a book for a three-to-four-week period or send you a photocopy of an article which appeared in a dental journal or dentally related publication. If a requested book is not available, information will be forwarded as to which library across Canada carries the book. As of January 1982, the library has a Medline Computer Terminal in operation. This means that "searches" for publications on specific subjects for research papers or articles can be requested.

The January 1982 CDA Journal published a detailed article explaining all of the services available. Please refer to this article for more information or contact CDA Library, 1815 Alta Vista Drive, Ottawa, Ontario K1G 3Y6 or telephone 613-523-1770, local 28.

This is a free service; however, if the demand becomes too great, a nominal fee may be instituted in the future to cover postage and duplicating costs. Please note that requests from CDA members come first, but it has been assured that requests from hygienists will not be refused.

Dale Scanlan, R.D.H.
Community Health Chairmam

Changes

Get out your pencils, summer issues, and make these changes . . .

Remember the extensive five-page grid of "functions and duties legally performed by dental hygienists" in Canada that was included in your summer '81 issue? Please retrieve it and make the following additions:

In addition to what appears in New Brunswick's column, hygienists in that province can also root plane, conduct screening and compile statistics for epidemiological purposes, administer first aid, perform a pulp vitality test, examine the head and neck as it pertains to dentistry, apply and remove periodontal dressings, remove sutures, desensitize teeth, remove overhangs, apply topical medicaments, apply and remove rubber dam, apply and remove a matrix and wedge, place temporary restorations, remove excess cement following cementation of orthodontic bands, take orthodontic impressions, take panoramic or cephalometric radiographs, perform cephalometric tracings, provide instruction in placement and care of a removable orthodontic appliance, prepare and record preliminary occlusal records, classify occlusion and identify deviant swallowing patterns, cement temporary crowns, irrigate root canals, and retract the gingiva for impression taking. Please mark an "x" in the box corresponding to each of the above duties in New Brunswick's column.

Nova Scotia has also sent in a correction. Under the heading *Licensing Authorities*, the Nova Scotia section should read, "Nova Scotia Dental Board, Dr. S. G. Ragnall, Sec-Registrar."

As other provinces send in changes to the grid or the list of licensing authorities, we will inform you. Send changes to Marg Miller, CDHA Education Chairman, 340 Overdale Street, Winnipeg, Manitoba R3J 2G4.

Executive Secretary spot filled

In November 1981 the position of CDHA Executive Secretary was assumed by Mrs. Thora Appelt of Ottawa, Ontario. Mrs. Appelt was born in Hertfordshire, England, and came to live in Edmonton, Alberta, in 1946. Since that time she has lived and



Thora Appelt succeeds Judy Dickie as our Executive Secretary.

worked in various parts of Canada, including Edmonton, Vancouver, Toronto and Ottawa. Her work experience includes all phases of office administration and knowledge of Telex, Payroll, Personnel work for a large West Coast Construction Company, and various positions at the University of Alberta, including Fees and Scholarships at the Bursars office and Departmental Secretary in the Department of Geology. In Ottawa her experience is with the Canadian Dental As-

sociation as Secretary to the Director of Accreditation/Council on Education/Council on Hospital Services.

Mrs. Appelt is married to V. Mark Appelt, M.Sc., P.Eng., and has two children, Marcus, who is a computer programmer and Elizabeth who is 16 and in grade 11.

Mrs. Appelt succeeds Mrs. Judy Dickie who was made an honorary member of our Association at the '81 board meeting.

Dental Hygiene Educators to Meet

The Canadian Dental Hygienists' Association is sponsoring a one-day seminar for dental hygiene educators Sunday, May 9, 1982 in conjunction with their annual board meeting. The major purpose of the seminar is to consider the direction of dental hygiene in Canada and to discuss the uniqueness of existing programs. All programs have been contacted and all participants will receive an information packet prior to the seminar to prepare them for discussions.

The seminar will be held at the CDHA convention headquarters with CDHA board members, committee chairpersons, and those with executive appointments present. All dental hygiene educators are invited to attend.

Help Us Cut Costs

Did you know it costs the CDHA 45¢ for each address correction given by the post office? To remail that returned journal once the new address has been located costs us another 45¢, making our bills for postage due run into several hundred dollars a year.

Help us avoid this expense. Send us your change of address as soon as you know you'll be moving. We'll save money, and you'll continue to receive *The Canadian Dental Hygienist* without interruption. If you're moving please detach the address label on your envelope, correct it, and mail it to Jo Gardner, Membership Chairwoman, 1125 West 54th Ave., Vancouver, B.C. V6P 1N3.

Committee to look at job concerns

Open hearings to identify major job concerns facing dental hygienists have been scheduled by the American Dental Association's Special Dental Hygiene Committee at four meetings this year.

Dentists, dental hygienists and the general public are invited to provide input on such key dental hygiene issues as job security, employee benefits and career opportunities.

"By encouraging a candid discussion at these hearings and also through written comments provided by local dental hygienists and dentists the Committee hopes to develop a wide range of objective information and to assess the magnitude of the concerns," said Dr. Don Allen Gainesville, Fla., Committee chairman.

The Committee, which includes representatives of the American Dental Hygienists' Association and the American Dental Association, will submit a final report later in the year as a step determining potential solutions to the

ore pressing issues.

The hearings are scheduled as follows:

Chicago Mid-Winter Meeting in conjunction with the Illinois Dental Hygienists' Association meeting, Saturday, Feb. 20 10 a.m. to 12 noon at the Holiday Inn, Chicago City Center

Hinman Dental Meeting, Sunday, March 21, 10 a.m. to 12 noon, Hilton Hotel, Atlanta

California Dental Association, Saturday, May 1, Disneyland Hotel, Anaheim

American Dental Hygienists' Association annual session, Sunday, June 12, 2:20 p.m. to 4:30 p.m., Palmer House, Chicago

Opinions expressed at the hearings must also be provided in writing to the committee.

For those unable to attend one of the hearings, written comments may be directed in confidence to the Special Dental Hygiene Committee at Suite 14, 211 E. Chicago Ave., Chicago, Ill. 60611. Deadline for the written comments is May 1, 1982.

The Johnson and Johnson-F.D.I. International Preventive Dentistry Awards

A grant from the Johnson and Johnson Dental Products Company of New Windsor, New Jersey, has made it possible for the FDI to establish International Preventive Dentistry Awards to encourage the development of new and innovative preventive approaches in dental health.

These awards provide an opportunity for recognition of dental personnel who have researched, developed and implemented preventive dentistry projects. A sum of US \$2,000 for each award is given at intervals of three years. The last award was presented during the FDI's 68th Annual World Dental Congress in Hamburg, in 1980. Entries are now invited, for presentation during the 71st Annual World Dental Congress in Tokyo, in 1983, for the following award categories:

COMMUNITY PROGRAMMES — covering: preventive approaches used in community education or public information purposes, such as primary and secondary school programmes, teaching aids, manuals, publications, research, films, clinics; programmes for special population groups — the aged, those in institutions and hospitals, the retarded and handicapped; research, public media and private practitioner's activities in the community.

PROFESSIONAL EDUCATION — to include: educational curricula and equipment used by the profession to learn about prevention, such as continuing education, recognized dental

society meetings, curriculum changes in dental schools, research and audiovisual aids for use in continuing education or dental schools.

RESEARCH — including innovative methodologies and new research findings which will facilitate the prevention of oral disease and improve oral health through such methods as plaque control, caries prophylaxis, prevention of periodontal disease, etc.

All entries must be received by the Executive Director of the FDI not later than 1st September 1982. Any dental health worker (including dental and auxiliary students), with experience in the chosen field, who is interested in submitting an entry, should write at once to the Executive Director of the FDI, 64 Wimpole Street, London W1M 8AL, U.K., for full details as to eligibility and conditions for submission of entries for the Johnson and Johnson International Preventive Dentistry Awards.

Applications now being accepted for CFDE Fellowships:

- I. Fellowship for Existent University Dental Teacher
- II. Fellowships for Teacher and/or Researcher Training

In category I CFDE will again offer a fellowship in 1982 for an existent dental teacher. This award is sponsored by Warner-Lambert Canada Inc. and has a value of \$2,000.00.

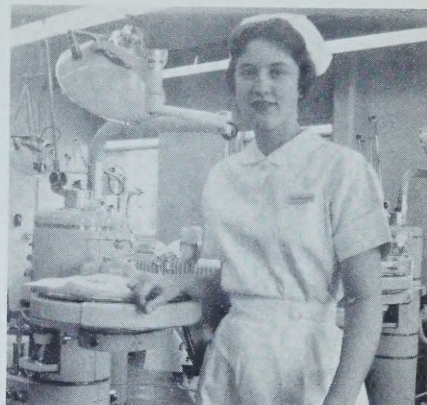
Candidates must be full-time members of the teaching staff of one of the Canadian schools of dentistry with a minimum of five years university teaching experience. Purpose of the award is to provide an opportunity for an established teacher to refresh and extend his/her knowledge in any field of dental education and research. Preference will be given to those who are not supported by sabbatical salary or other grants.

In category II a number of fellowships will be awarded to applicants preparing for a teaching and/or research career in a Canadian school of dentistry or dental hygiene. The number of fellowships to be awarded for the 1982/83 academic year and their value will be determined by the Fund's Advisory Committee on Fellowship Selection and Board of Trustees.

The names of the fellowship recipients will be announced in May 1982.

Full particulars of the fellowships in both categories may be obtained from the office of the Dean in each dental school or the Canadian Fund for Dental Education office at Suite 205, 44 Eglinton Avenue West, Toronto, Ontario M4R 1A1.

Commitment to CDHA recognized



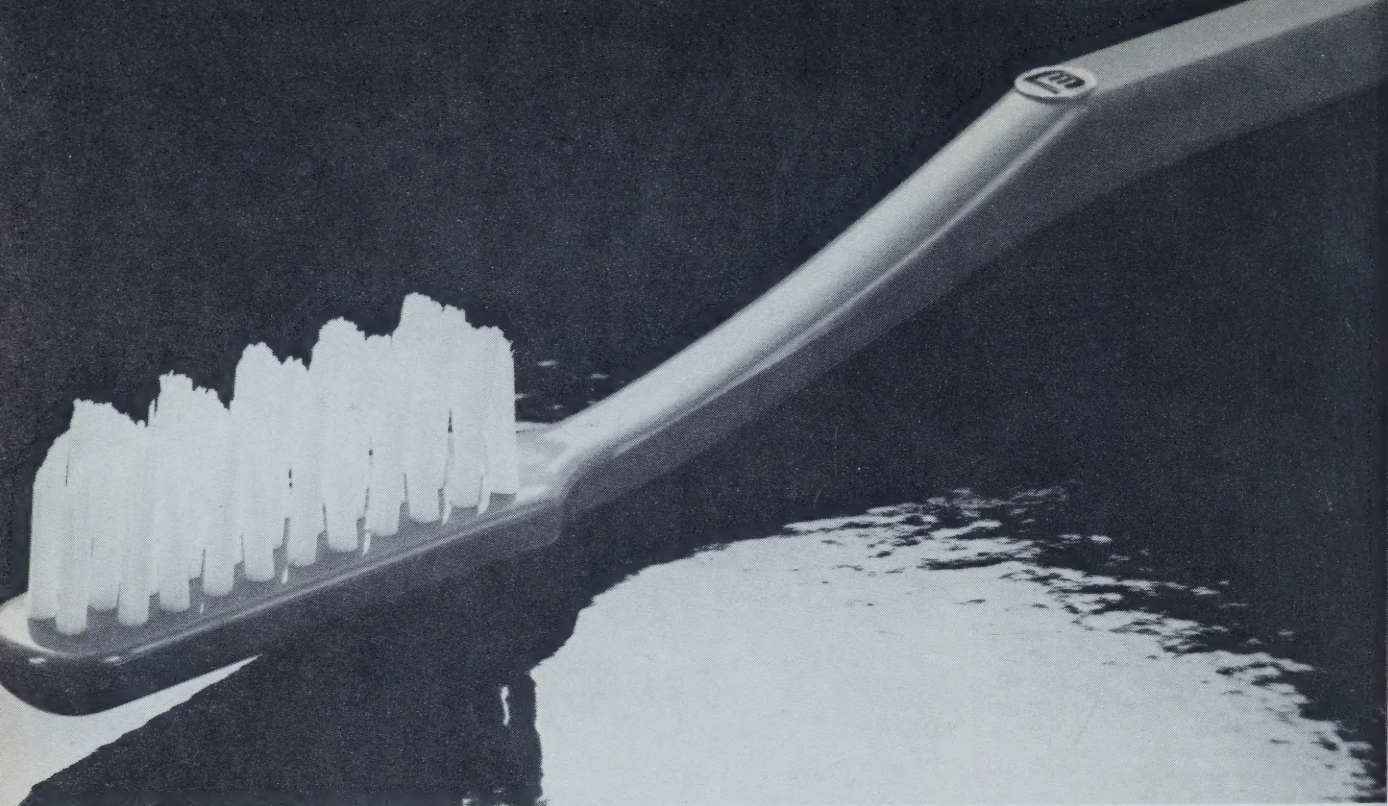
Dental hygiene student, Marg Miller, stands beside her unit at the U. of T. Dental School on College Street in the spring of '58.

Margaret E. Miller was unanimously acclaimed our sixth life member of the Canadian Dental Hygienists' Association at the '81 board meeting held in Calgary. Mrs. Miller was selected for life membership by the Executive Council since she has been an active member of the CDHA for over 10 years and, during these years, she has shown leadership qualities which enhanced and directed the growth of our Association by chairing our Education Committee and acting as our voting representative on the Canadian Dental Association's Council on Education.

Most of Mrs. Miller's career path has centered around dental auxiliary education and community health. She has worked as a community health hygienist for the dental health services of Manitoba and Saskatchewan, the Health Sciences Centre, Winnipeg, and the St. Amant Centre for Retarded Children and as an educator with the Red River Community College Dental Assisting Program, University of Manitoba School of Dental Hygiene, where she co-ordinated the Preclinical and Clinical Dental Hygiene Course and the Community Dental Hygiene program, and the Faculty of Dentistry, where she co-ordinated the Geriatrics Program, and the Patient Control Program.

In addition to her employment commitments, she has served as a member of the Manitoba Dental Association's Accreditation Survey Team, a consultant to Keewatin Community College Dental Assisting Program, a member of the Manitoba Department of Education, School Health Curriculum Writers Committee, and a member of the Winnipeg Chapter and Manitoba Division, Multiple Sclerosis Society.

A graduate of the Diploma in Dental Hygiene Course, University of Toronto and the Bachelor of Arts program, University of Manitoba, she is once again a student working towards her Masters in Community Health at the University of Manitoba. □



Four recent studies* into relative toothbrush efficacy have proven the same thing. Jordan brushes best.

The Jordan V Soft. The Jordan V-tufted soft-bristle toothbrush was found to be the most efficient of all brushes tested in terms of plaque removal, particularly in interproximal margins.

V-Tufted Brushes. V-tufted toothbrushes were found to

remove plaque more effectively than straight-cut multitufted toothbrush designs.

Soft Bristles. Soft-bristle brushes remove plaque better than firmer textures, particularly when vertical brushing motions are used.

Time Spent Brushing. Not surprisingly, plaque removal was found to increase with time spent brushing.

Brushing Pressure. Also confirmed was that plaque removal is significantly enhanced with increased pressure of brushing.

Jordan

**Designed to reach
where other brushes can't.**

*Yankell, S.L., U Pa Sch Dent Med, Phila, Penn IADJ
Journal of Dental Research, Jan 79, Vol. 58, P. 239,
Abstr 585
Nygaard-Østby, P., et al, Jordan as Oslo, Norway: U
Sch Dent Med, Phila, Penn.
Bergenholtz, A., Dept Periodont, U Umea, Umea, Sw
Yankell, S.L. et al, U Pa Sch Dent Med, Phila, Penn.

FOR FURTHER INFORMATION, OR TO ORDER
PROFESSIONAL SUPPLIES, WRITE TO: "THE JORDAN
TOOTHBRUSH", C/O FRANK W. HORNER INC., P.O. BOX
959, STATION "A", MONTREAL, QUEBEC H3C 2W6, OR
TELEPHONE (COLLECT) 514-731-3931.

HORNER
Montreal Canada

personal finance

Suzanne Sheaves, R.D.H., B.A., M.B.A.

Suzanne Sheaves has worked in various dental hygiene and business teaching and consulting areas since 1971. She recently completed a Master in Business Administration degree in finance and marketing. She is currently employed by the investment firm of McLeod Young Weir Limited.

It is not difficult to argue in favor of financial planning. The past year bombarded us with painfully high interest rates, inflation of 12.5%, an increasing number of unemployed persons and a weakened economy. However, this rationale leads to a financial plan that is reactive.

The most effective financial plan is designed to deal with all situations, including economic recessions. The following are recommended steps to follow when attempting to develop a responsive and relevant personal financial plan (Brown, 1981):

Identify personal financial goals

Usually these goals are allocated among three categories: lifestyle, financial security and estate requirements. An official brainstorming session with all family members is essential for adequate identification. Resulting goals should be labelled priority, short term, and long term.

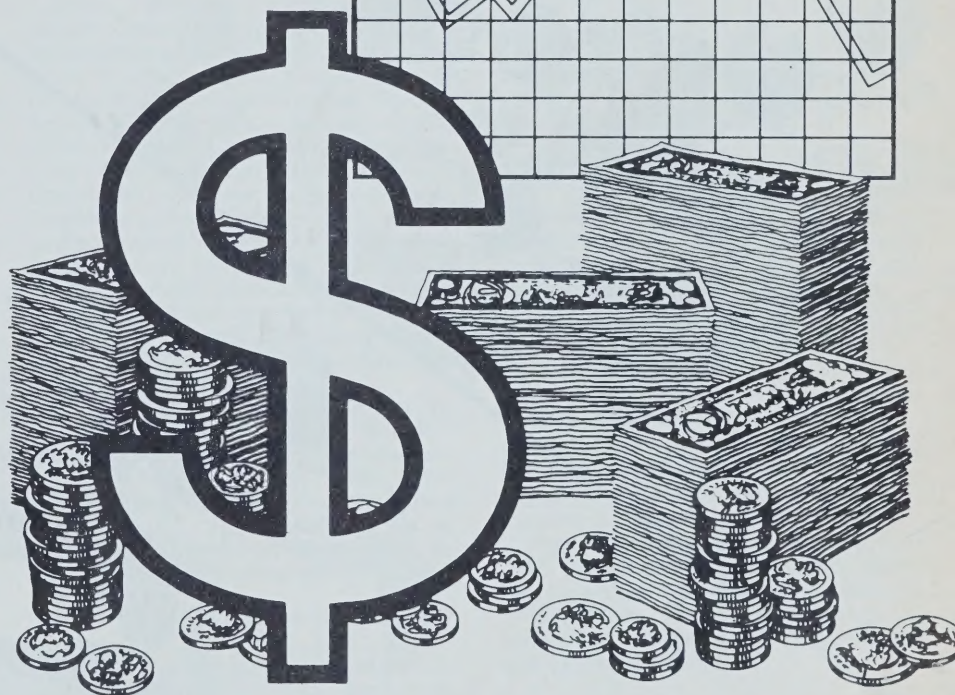
Determine available resources

One's net worth should be determined on an annual basis. Simply, this calculation is assets minus liabilities. Assets include bank accounts, the market value of stocks and bonds, the cash value of life insurance policies, the sale value of cars, furniture and other similar assets. Weekly and monthly expected income is not an asset. Liabilities include charge account balances outstanding, loans, taxes, mortgages, unpaid household bills, etc. A net worth statement is similar to a photograph of one's financial position.

Monthly and annual expected financial resources should be listed. It is helpful to divide these according to: income (both regular and self-employed), government payments, investments, retirement income, and other (gifts, borrowing, savings to be spent).

Estimate Costs

Fixed and flexible living expenses should be identified on a monthly and annual basis. Allowances should be made for unexpected purchases, emergencies, and retirement plans. A savings target should be established based on the goals identified earlier.



4) Construct the Financial Plan

It is probably easier to do this on an annual basis. Simply state the expected resources available less the total expected expenses plus savings. If the difference is a positive amount, one can plan to add it to savings or expenses, depending on the financial goals. A negative balance identifies the need to either increase resources, cut down expenses or both.

5) Financial Plan Control

The plan will work only if every family member shares the commitment. It is essential to keep track of income and expenditures as they occur. The method of record keeping must be practical. The plan must be continually reviewed and updated. It must allow flexibility to deal with unexpected situations.

Financial planning, then, is a con-

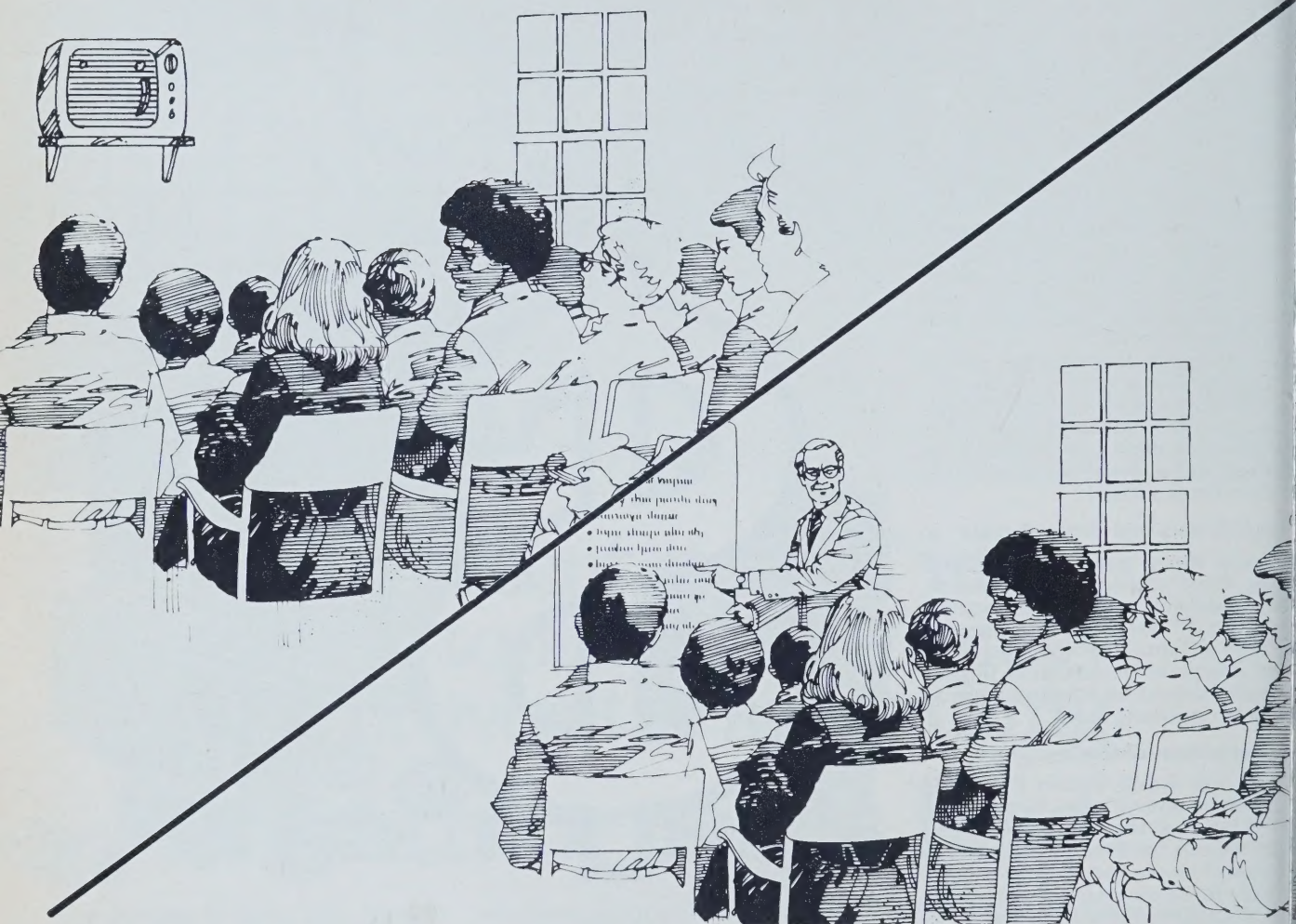
tinuous process. Once in motion it provides a methodical approach for attaining one's financial goals and objectives. It identifies opportunities for decreasing expenses and/or increasing resources. The latter is the topic for the next article. Specifically, the use of investing as a means of expanding one's capital and the distinction between the saving and investing process. □

References:

- Brown, K.H. **Personal Finance**, Ontario: Prentice-Hall, 1981
- Canadian Securities Institute, **The Canadian Securities Course**, Ontario: C.S.I., 1981
- Gitman, L. J. **Principles of Management Finance**, New York: Harper & Row, 1979
- Robinson, R. I. & Johnson, R. W. **Self-Correcting Problems in Finance**, Boston: Allyn and Bacon, 1976

A Comparison of the Effectiveness of Television vs. Live Instruction for Teaching Flossing in the Classroom

Beverly Davis, C.D.A. and Guy Costanzo, B.Com.



The cost of providing a public health dental service is significant.

Oral hygiene instruction is a usual component of public health dentistry in the school system, but is burdensome in that trained auxiliaries must repeat the same material many times in order to provide service to an entire school district. In addition, although dental health education is the backbone of most preventive programs, only limited evidence is available to demonstrate the effectiveness of this education in changing motivation or consequent behaviour.

In an effort to curb costs, while still providing oral hygiene instruction to as many children as possible, the current study evaluated a labour saving alternative.

The use of a videotaped program of instruction in flossing that could be shown by a teacher was tested against the alternative of providing a trained

dental auxiliary to deliver the program of instruction live. If student performance following the videotaped program was equivalent to, or better than, live instruction, use of this medium would be advocated on a much wider scale. A control group receiving no instruction in flossing technique was included for comparison.

The ability to floss correctly was the only variable addressed by the study. The complex questions of motivation and behavioural change were not examined.

Review of the Literature

The role of oral plaque in the formation of dental caries and periodontal disease is not fully understood, although the presence of plaque is considered a precursor to both condi-

tions.¹ Elimination of plaque has been shown to be associated with a reduction in both conditions.^{2,3,4,5}

A number of investigators have used a variety of educational techniques attempts to demonstrate increases in knowledge and/or reductions in plaque, caries, and periodontal disease. Only a few have been successful on all counts.

Vande Voorde⁶ found that individual chairside instruction was superior to film in increasing adults' scores on written oral hygiene knowledge tests, whereas Radentz and associates⁷ found no difference between individual chairside instruction and television in increasing adults' actual ability to correctly floss their teeth — both resulted in some skill improvement. In a later study, Radentz's group⁸ found that a combination of televised instruction with chairside reinforcement was superior to either method alone.

measured by the ability (of adults) to floss correctly.

McKee et al⁹, working with students in grades four, five, and six, was unable to find a significant reduction in dental caries following detailed instruction and practice in brushing and flossing using the classroom teacher as the instructor.

Huntly¹⁰, working with grade five students, found a significant difference in their ability to remove plaque following a two-week program of live oral hygiene instruction using trained hygienists.

Wright and coworkers¹¹, working with first grade students, were able to show a significant reduction in interproximal caries over a 20-month period following a program of daily flossing done by a trained research assistant—no attempt was made to train students to perform the task themselves, however.

In a series of studies, Albino^{12,13,14}, working with sixth, seventh, and eighth graders, was able to demonstrate significant reductions in plaque following live instruction in oral hygiene coupled with techniques (behaviour modification, dissatisfaction, clarification of health value) designed to increase student motivation to adopt brushing and flossing as regular health behaviour.

Levine and Hubbard¹⁵ found essentially no difference in the levels of plaque and gingival inflammation following live instruction and supervised flossing in elementary school children, though a comparison control group's oral health deteriorated over the period of the study, leading to statistically significant results.

Rayant¹⁶, found no significant relationship between knowledge and dental behaviour (evidenced by a gingival index score) in patients attending periodontal clinic. This would seem to support Albino's notion that additional motivating factors must be taken into account to achieve any kind of behavioural change following a program of oral hygiene instruction.

In a review of a number of oral hygiene teaching methods, Melcer¹⁷, concluded that:

"Preventive dentistry teaching sometimes promotes improved oral hygiene during the duration of the teaching period of the study and in some cases for a relatively short period afterward . . . a single session of small-group instruction does not of itself alter long-term oral hygiene performance . . . closely supervised teaching on a multiple visit basis with periodic reinforcement can result in a significant, sustained improvement in oral hygiene."

Materials and Method

The videotaped program of instruction (three sessions of approximately

fifteen minutes each) was prepared using the resources of a community cablevision organization and an adept amateur cameraman (The same person (B.D.) presented the same content in both the televised and the live instruction).

As the studio facilities were donated, and the time of the cameraman was volunteered, costs were kept to a minimum. These costs would have to be taken into account if the study were to be replicated elsewhere.

The Municipality of Burnaby, British Columbia, was selected for the study, following discussion with local School Board officials. Burnaby was not conducting a public health dental education program in its school system and subjects would therefore have had no classroom exposure to flossing instruction.

Three schools serving similar socioeconomic neighbourhoods were selected for study and assigned at random to one of the two treatment groups or to the control group. Precise socioeconomic data was unavailable (human rights and confidentiality issues preclude gathering this in British Columbia), however, all three schools serve neighbourhoods which would be considered 'lower-middle' class. All three schools have large populations of children from non-Canadian origins (from one-third to one-half of their students). Of these non-Canadian groups, from 50-70% originated in Asia and the Indian sub-continent.

A number of oral hygiene indices^{18,19,20} were examined. Anaise²¹ found the Patient Hygiene Performance (Modified) Index¹⁹ was more sensitive than the Oral Hygiene Index (Simplified)¹⁸ in assessing oral hygiene. Based on this information, an index was constructed similar to the PHP-M.

Each proximal surface of the upper and lower 1's and 2's (11, 12, 21, 22, 31, 32, 41, 42) was scored 0 if no plaque was present and 1 if it was. The scores were then totalled to give an index from 0-16. An index of 1-3 would be acceptable. (This is arbitrary).

A dentist served as examiner for the study and was unaware to which group any school or subject belonged. Classes participating were all from Grade 5.

At the initial visit, all subjects were given dental floss and a mirror. Subjects were then asked, without instruction, to floss their four upper and lower front teeth. The examiner then applied red disclosing solution to the teeth flossed, using a cotton-tipped applicator. The subjects rinsed and were then examined.

Classes in the videotape group then saw the three lessons at one-week intervals. Each lesson was followed by a short practice session with dental floss. All lessons were under the supervision of the classroom teacher.

Classes in the personal instruction group received the same three lessons live from the Certified Dental Assistant

(B.D.), who then supervised the dental floss practice session.

Classes in the control group received no instruction.

One week following the conclusion of the lessons, subjects in all three groups were re-examined by the dentist.

Two months following the post-intervention examination, subjects were re-examined again to assess the longer term effects of the intervention. The procedures for all three examinations were identical.

Approximately 150 subjects were involved in the initial examination. No attempt was made to follow up on any student not present for any of the three examinations, so that complete data for all three examinations were available for 91 subjects at the conclusion of the study.

Results

A summary of the scores found at each of the three examinations during the study appears in Table 1.

Table 1 (Pages 15 and 21)

It was hypothesized that there would be no statistically significant difference in the average scores of each of the three groups on initial examination.

This was evaluated by a one-way analysis of variance, the results of which appear in Table 2.

Table 2 (Page 21)

The value of F is not significant ($p < .95$) and it was therefore concluded that the three groups were similar at the outset.

The changes between the initial and first post-intervention results were examined for a statistically significant difference in the average change in scores among the groups, by one-way analysis of variance.

Table 3 (Page 21)

The value of F is not significant ($p < .95$) indicating that there was no difference in the average change in scores found among the three groups.

The changes between the initial and second post-intervention results were then examined for a statistically significant difference in the average change in scores among the groups, again by one-way analysis of variance.

Table 4 (Page 21)

The value of F is significant ($p < .95$) indicating that there was indeed a difference in the average change in scores found among the three groups.

Each group was then further examined for a statistically significant difference between the average scores at the initial examination and at the second post-intervention examination using the Student's t distribution. In the videotape group the results were

significant ($t=4.25$, $P > .95$), whereas in the personal instruction and the control groups they were not.

The results overall indicate that the intervention did not have any useful effect in any of the three groups. The results in the group exposed to the videotaped course of instruction were particularly disappointing, and although their pre-post results were statistically significant, the difference may have no *practical* significance.

Discussion

The choice of a measure to use in evaluating the success of a program of instruction is determined in part by the desired outcomes of the program, in addition to questions of precision, accuracy, replicability, and economy.

This study used a measure based on the presence or absence of plaque on the proximal surfaces of eight teeth as indicative of effective flossing technique learned as a result of our educational intervention.

The purpose of our program was to teach flossing technique — the ability to demonstrate the effective removal of plaque from the teeth would be evidence of a successful teaching outcome. Our sample, however, exhibited highly variable performance levels, both before and after our educational interventions, based on the measure employed. As all examinations were done by the same dentist, the question of inter-related reliability does not arise.

Perhaps the desired outcome could be demonstrated by replicating the study in a sample of students with uniformly poor performance on initial examination. A more homogeneous group of subjects would reduce the variability and make easier the detection of significant improvement. This protocol would understandably be more complex to administer, and would negate our desire to evaluate the success or failure of the instruction in an ordinary school setting, such as is found in our community dental health program.

If we examine the results in detail (TABLE 2) we find no significant difference amongst the groups on initial examination — this is as it should be as classes were drawn from the set of Grade 5 pupils in schools with similar socio-economic catchment areas with no selection criteria.

Two post-test examinations were conducted, the second to determine if the possible effect of the educational intervention would last at least two months. Surprisingly, no demonstrable effect was shown at the time of the first post-intervention examination (TABLE 3) but there seemed to be some improvement in the results two months later in the groups receiving personal instruction. Further examination of the results (TABLE 4) shows this is not significant — in fact the changes

were not significant in any group, however, the mean scores at the initial and second post-intervention examinations are statistically different in the videotape group. Unfortunately, this group performed worse instead of better.

One thing is clear, and that is that much more research is necessary in the area of dental health education. Little is known of the factors, perhaps combinations of factors, that motivate people to adopt health-enhancing behaviour. If more were known, it would be easier to design cost-effective educational and promotional strategies that achieve positive results. □

References

- Kleinberg, I. The role of dental plaque in caries and inflammatory periodontal disease. *J. Can. Dent. Assoc.* 40:56-66, 1974
- Badersten, A., Egelberg, J., Koch, G. Effect of monthly prophylaxis on caries and gingivitis in school children. *Community Dent. Oral Epidemiol.* 3:1-4, 1975
- Wright, G., Banting, D., Feasby, W. The effect of interdental flossing on the incidence of proximal caries in children. *J. Dent. Res.* 56:574-8, 1977
- Horowitz, A., Suomi, J., Peterson, J., and Lyman, B. Effects of supervised daily dental plaque removal by children: 12 months result. *J. Pub. Health Dent.* 37:180-188, 1977
- Suomi, J., Greene, J., Vermillion, J., Chang, J., and Leatherwood, E. The effect of controlled oral hygiene procedures on the progression of periodontal disease in adults: Results after two years. *J. Periodont.* 40:416-420, 1969
- Vande Voorde, H. A movie vs. chairside instruction to present preliminary oral hygiene information. *J. Periodont.* 43:277-280, 1972
- Randentz, W., Barnes, G., Ailor, J., and Johnson, R. An evaluation of two techniques of teaching proper dental flossing procedures. *J. Periodont.* 44:177-182, 1973
- Radentz, W., Barnes, G., Kenigsvarg, H., Carter, H. Teaching dental flossing to patients via television reinforced by individual instructions. *J. Periodont.* 46:426-29, 1974
- McKee, D., Faine, R., Murphy, R. The effectiveness of a dental health education program in a non-fluoridated community. *J. Pub. Health Dent.* 37:290-99, 1977
- Huntley, D. A dental health program for fifth graders: Results after three months. *Dent. Hyg.* 53:380-382, 1979
- Wright, G., Banting, D., and Feasby, W. The Dorchester dental flossing study: Final report. *Clin. Prev. Dent.* 1:23-26, 1979
- Albino, J., Juliano, D., Slakter, M. Effects of an instructional-motivational program on plaque and gingivitis in adolescents. *J. Pub. Health Dent.* 37:281-289, 1977
- Albino, J. Evaluation of three approaches to changing dental hygiene behaviours. *J. Prev. Dent.* 5:4-11, 1978
- Albino, J., Tedesco, L., Lee, C. Peer leadership and health status: Factors moderating response to a children's dental health program. *Clin. Prev. Dent.* 2:18-21, 1980
- Levine, C., and Hubbard, K. An investigation of the effects of self-flossing program in London elementary schools. *Ontario Dent.* 56:28-31, 1979
- Rayant, G. Relationships between dental knowledge and tooth clearing behaviour. *Community Dent. Oral Epidemiol.* 7:191-194, 1979
- Melcer, S., Feldman, S. Preventive dentistry teaching methods and improved oral hygiene — A summary of research. *Clin. Prev. Dent.* 6:7-13, 1979.
- Greene, J. D., Vermillion, J. R. The simplified oral hygiene index. *Am. Dental Assoc.* 68:7-13, 1964
- Podshadley, A. G., Haley, J. V. A method for evaluating oral hygiene performance. *Pub. Health Reports* 83:259-264, 1968
- Martens, L. V., Meskin, L. H. An innovative technique for assessing oral hygiene. *J. Dent. Child.* 39:114, 1972
- Anaise, J. Z. A comparison of two oral hygiene indices for measuring the effectiveness of dental floss plaque removal. *J. Pub. Health Dent.* 37:62-67, 1977
- Freed, J. R., Mathias, R. E. Evaluation of dental health education programs. *J. Pub. Health Dent.* 40:39-46, 1980

Acknowledgements:

Special thanks are due to Dr. N. Trowbridge, Elaine Cross, Maureen Peters, and the Grade 5 classes and their teachers from Stride, Second Street, and Windsor Elementary Schools in Burnaby, British Columbia and to Drs. S. J. Gallagher, I. Glasgow and J. Lee, of the Vancouver Health Department, for their assistance in this study.

About the authors: Beverly Davis is a certified dental assistant employed by the Faculty of Dentistry, University of British Columbia. Guy Costanzo is a research officer with the Vancouver Health Department.

TABLE 1.

Summary of Results

Number of Students Scoring:

Group:	0-3			4-7			8-11			12-16			Total
	Pre	Post 1	Post 2	Pre	Post 1	Post 2	Pre	Post 1	Post 2	Pre	Post 1	Post 2	
Personal	8	9	10	10	6	6	6	5	9	8	12	7	32
videotape	6	6	1	3	4	5	7	7	5	9	8	14	25
control	7	5	2	5	5	8	13	7	8	9	17	16	34
	21	20	13	18	15	19	26	19	22	26	37	37	91

Mean Scores ($\pm$ Standard Deviation):

Group:	Initial Exam	First Post-Intervention Exam	Second Post-Intervention Exam
Personal	7.7 $\pm$ 5.6	8.1 $\pm$ 5.8	6.9 $\pm$ 5.5
videotape	8.3 $\pm$ 5.6	8.8 $\pm$ 5.5	11.4 $\pm$ 4.8
control	8.9 $\pm$ 5.1	10.1 $\pm$ 5.5	10.4 $\pm$ 5.0

continued on page 21

WE NEED YOU; YOU NEED US.

Renew your
professional
membership today.

Your membership
is your voice in
your future!



The Efficacy of Professional Flossing in the Control of Gingival Health

Maureen A. Vercaigne, Dip. Dent. Hyg. and Shirley C. Gelskey, Dip. Dent. Hyg., B.S., M.P.H.

Should flossing be recommended to patients? Flossing has been advocated for the removal of plaque from the proximal tooth surfaces where a toothbrush cannot clean. Scientific studies have revealed that plaque adjacent to the gingival margin of the tooth is a precursor to gingivitis.^{1,2} Toothbrushing alone is insufficient to remove plaque from the proximal surfaces.^{3,4,5} It has been proposed by some researchers that floss removes plaque from the interdental area and, therefore, reduces the incidence of gingivitis.^{4,6,7} Insufficient scientific evidence exists however, to demonstrate conclusively the therapeutic value of floss in the control of gingivitis. Fewer studies have been carried out in which dental professionals conduct the flossing procedure, thereby eliminating the possibility of improper flossing technique.^{5,8,9}

The purpose of this paper is to present a literature review of the effect of dental floss in the control of gingivitis. The review was initiated to determine if sufficient scientific evidence exists for the recommendation of flossing as an oral hygiene adjunct or whether further research is necessary. It is not the purpose of this paper to analyse the efficacy of flossing in the control of dental caries.

Review and Evaluation

The literature to date regarding the use of dental floss in the control of dental disease has been inconclusive. One researcher described the recommendation of flossing as "the great American hoax"¹⁰; while other researchers have advocated flossing as an adjunct in the removal of proximal plaque.^{6,8,9}

A. Articles Not Supported Scientifically:

FLOSSING PROPOSED

Larato summarized articles which suggested that increased susceptibility to gingivitis in the papillary areas was due to three major causes:⁶

1. difficulty for the patient in cleaning interdentally.
2. defective margins of restorative dentistry, resulting in mechanical plaque irritation and increased plaque retention.
3. increased susceptibility of the "col" to inflammation due to its anatomical form and non-keratinized surface.

Following the description of several methods of interdental cleaning, Larato stated that flossing was an excellent means of removing debris from the proximal root and crown surfaces. He suggested that optimal plaque removal began with good restorative dentistry and included intrasulcular brushing along with proximal cleansing with dental floss. Larato provided references on each device outlined, but based his conclusions on other people's results rather than on clinical research.

A lingual flossing procedure (whereby patient loops floss around the lingual surfaces of lower anteriors) was effective in reducing gingival inflammation according to Prince.¹¹ The technique included a combination of left to right and up and down rubbing with the floss on the tooth surface. The report stated that most patients accepted the technique; few found it difficult to accomplish, and that most quickly noticed "a difference" in their mouth. It is not reliable scientifically, however, to base his support of this method of flossing on patient's acceptance of the procedure. Prince, in addition, does not define the meaning of "a difference" in oral health as described by the patients; therefore, it is not possible to use these findings as scientific evidence to either indicate or contraindicate the use of dental floss.

In a review of the literature in 1971, Richardson reported the differences in opinions of researchers on a variety of plaque control devices. He believed that, in the future, systems and methods should be developed which would place less reliance on patient-dependent mechanical measures. At the time of his review, he concluded mechanical methods to be the most effective means of controlling dental plaque. He stated that floss was the most commonly recommended method for proximal plaque removal.

A recent literature review on dental floss was published in 1979 by Zarkowski.¹³ It was concluded that most authors found dental floss effective in oral maintenance procedures, but that no scientific literature existed to support these findings. Zarkowski recommended further scientific investigation into the effectiveness of dental floss.

FLOSSING OPPOSED

Thomas¹⁰ said that the recommendation of

dental floss by professionals was "the great American hoax". The hoax was the cleaning efficacy of floss. Thomas' article provides no conclusive evidence positively or negatively for the recommendation of flossing as a mechanical aid for plaque removal from proximal tooth surfaces. The article also failed to present scientific evidence regarding the effect of dental floss on the prevention of oral disease.

Articles Supported Scientifically. Flossing Procedures Not Carried Out by Professionals:

FLOSSING PROPOSED

This section evaluates articles which were based upon empirical evidence. The flossing procedures were not carried out by professionals.

Mohammed⁷ felt that too much emphasis was placed on the use of the toothbrush and suggested that a cleaning device was necessary for the removal of plaque from the proximal and cervical portions of the teeth. The purpose of Mohammed's investigation, which involved 104 patients, was to determine the effect of dental floss on maintaining good oral hygiene. The plaque score, which was taken before and after toothbrushing, showed varying amounts of plaque on the proximal surfaces. After the patient flossed, most plaque was removed and the average plaque score was lowered significantly. The article failed to state whether the subjects redisclosed after flossing. If the subjects did not redisclose, the reduction in the plaque score may have been due, in part, to salivary and mechanical self-cleansing of the oral cavity, as disclosing solutions tend to become diluted on the teeth over time. This study does not attempt to evaluate the effect of plaque reduction on gingival health.

Horowitz and Silverstein recently conducted two school-based programs of supervised flossing in which the flossing was not carried out by dental professionals.¹⁴ The studies, conducted over a period of three academic years, investigated the effect of plaque removal, by brushing and flossing, on dental caries and gingival health. It was found that plaque and gingivitis scores were reduced by a statistically significant amount, however "Decayed, Missing and Filled Surfaces" (DMFS) were not reduced statistically. It was concluded that school-based programs designed to control plaque by mechanical methods were ineffective over a long time period since plaque and gingivitis scores resumed their original levels during summer vacation. The study did demonstrate that, when supervised, scores could be reduced for plaque and gingivitis.

Gjerme and Flotra compared three interdental cleaning devices.¹⁵ Two study groups were utilized: dental students with minimal periodontal breakdown and individuals with a known history of periodontal breakdown. A comparison was made of the effectiveness and the degree of difficulty in usage of three interdental aids. The three aids were unwaxed dental floss, triangular

toothpicks, and the interdental brush. It is inappropriate, however, to judge the effectiveness or the degree of difficulty of various interdental aids when the variables of patient dexterity, skill, and knowledge are not controlled. It is probable that the dental students could manipulate the cleaning devices better than the other group of subjects. The conclusions drawn from this study population regarding the value of interdental aids may be questioned for application to the general population. In addition, these experiments made no attempt to correlate interproximal gingival health with the use of the various oral physiotherapy devices.

FLOSSING OPPOSED

Several researchers used experiments designed scientifically to compare various interdental aids and found floss to be equal to or less effective than other devices in removing plaque from proximal surfaces.

Hill, in 1973, compared the plaque-removing capabilities of toothbrushing using dentifrice, toothbrushing using dentifrice plus unwaxed dental floss, and toothbrushing using dentifrice plus waxed dental floss.¹⁶ Interdental plaque accumulation and the condition of the interdental gingiva were studied to compare the efficacy of the three regimens. It was noted, after three consecutive experimental periods of 28 days each, that there was no significant difference in the Gingival Index scores among any of the regimens. It was not clear, however, that sufficient instruction in proper flossing and brushing techniques was delivered prior to the study.

Bergenholz conducted a clinical study (1974) on the plaque-removing capability of floss, and round, triangular, and rectangular toothpicks.¹⁶ Each adjunct was used in combination with toothbrushing. The results showed that round and rectangular toothpicks removed plaque from the buccal aspect of the proximal surfaces only, but the triangular toothpicks and dental floss were effective on both the buccal and lingual aspects of the proximal surfaces as well as interproximally. Patient's skill was an uncontrolled variable in the plaque removal capability of the devices.

Vogel compared brushing alone to brushing in combination with the rubber tip, and to flossing in combination with the rubber tip.¹⁸ Results showed that proper use of Modified Bass brushing method alone could maintain interproximal health. The researcher stated that, in the flossing and brushing groups, two of the six candidates failed to follow the prescribed regimen throughout the test period. It would appear that this inconsistency could affect the results of the research and yield the study unreliable.

Results similar to Vogel's were found in a study by Wolffe.¹⁹ There was no significant difference in the plaque-removing capability of waxed floss, the single-tufted brush (Inter-Space Brush) or stimudents (Inter-dens). Floss was found to be

least accepted by patients due to individual difficulties in manual dexterity involved in carrying out the flossing procedure. Instruction was given by a periodontist before any device was used by the subjects. The periodontist demonstrated the procedure in the subject's mouth, then the subject was supervised while practicing the procedure. Each subject was given printed instructions in the use of the three agents. Although the subjects received prior instruction, they were only 50% efficient in removing plaque from the proximal surface with any of the three devices. This suggests the need for professional flossing as part of a study which is designed to measure the efficacy of the procedure itself.

The use of embroidery yarn was compared to dental floss in a study by Boudreaux in 1977.³ It was concluded that yarn was more effective in removing plaque than was the floss because the interproximal tissue appeared slightly less inflamed. It was also noted that with yarn the gingiva had a tendency to exhibit blunting. In spite of the blunting, the author advocated yarn over floss because yarn appeared to him to remove plaque more readily due to its greater surface area and rough texture.

Godin stated that for flossing to be effective sufficient pressure against the proximal surface of the tooth is required.¹⁴ Radentz stated that the majority of patients do not floss properly, but that improvement in technique could be demonstrated with continued professional instruction and experience.²⁰ In analyzing the information from Godin and Radentz, it is suggested that professional flossing may be necessary to ensure proper flossing technique.

In the studies outlined in this section, professional flossing was not administered. In many of the studies, patients were given limited instruction in flossing. In other studies, the subjects had difficulty with the flossing procedure. In all cases, invalid or insufficient evidence is available to evaluate the flossing procedures itself as an oral maintenance procedure since flossing was not administered professionally.

C. Articles Supported Scientifically. Flossing Procedure Carried Out by Professionals:

FLOSSING PROPOSED

The following articles evaluate the ability of floss to remove plaque and the resulting effect on the health of the gingiva. Professional flossing was administered in all studies in this section.

The effect of using various types of dental floss on gingival sulcular bleeding was studied by Carter.⁴ The study was divided into two parts. In part I, a control group and three other groups using various types of dental floss were monitored for gingival bleeding scores. Flossing was administered professionally over eight consecutive days, excluding Saturday and Sunday when self-flossing was substituted for professional flossing. In part II the same procedure was used except that,

after the flossing instruction had been given, the individuals self-flossed for eight days. Final examinations demonstrated the value of flossing in the reduction of gingival bleeding for part I and part II of the study. Higher reductions in gingival bleeding scores were noted in the self-flossing groups at 57.5% and 76.4%, than in the professionally flossed group at 44.2% and 74.5%. From this study it appears that self-flossing is more effective than professionally administered flossing. It is noteworthy, however, that those individuals in part I performed self-flossing in two of the eight days. This represents 25% of the time of the subjects during the weekend, which could have affected their bleeding scores. The study does not compare self-flossing to professional flossing results over the complete study period. The author states that greater reductions in bleeding for the self-flossing groups occurred as this group had higher initial bleeding scores than did the subjects in part I. Subjects in part II had a greater chance for improvement of their gingival bleeding score.

The purpose of the investigation carried out by French and Friedman was to compare the plaque removal capability of waxed dental floss to unwaxed dental floss.⁵ Although professional flossing was administered, the study did not investigate the relationship of plaque removal by flossing to gingival health.

In a later study, waxed and unwaxed dental flossing procedures were administered by a dental hygienist to evaluate the effectiveness of the procedures in reducing gingival inflammation. Two different scoring methods were employed to measure gingival inflammation, the Gingival Sulcular Bleeding Scale by Carter and Barnes, and the Gingivitis Severity Scale by Loe and Silness. It was demonstrated that professional flossing reduced gingival inflammation. It was found that 96.0% of the initial bleeding sites became negative and only 1.1% new bleeding sites appeared. It was found that significant reductions in bleeding sites occurred on the control side of the mouth as well. The control side presented a reduction in bleeding sites of 76.7% while 6.5% new bleeding sites appeared. It seems, therefore, that flossing was not the only factor which contributed to an improvement in gingival health. However, this study does provide more conclusive evidence than any other study reviewed for the recommendation of dental floss in the control of gingival health.

The studies outlined above which included professional flossing do not provide sufficient evidence to fully evaluate the effect of the procedure of dental flossing alone to gingival health.

Summary

The most recent literature concerning the efficacy of dental floss in the control of gingivitis was reviewed and evaluated. The purpose of the review was to determine if valid studies have deter-

illustrated the benefit of professional flossing in the control of gingival disease. The literature was divided into the following areas:

Articles not supported scientifically

- a) flossing proposed
- b) flossing opposed

Articles supported scientifically; flossing procedures not carried out by professionals

- a) flossing proposed
- b) flossing opposed

Articles supported scientifically; flossing procedure carried out by professionals

- a) flossing proposed
- b) flossing opposed

Most of the literature reviewed and evaluated was characterized by studies designed inadequately (no control group, lack of proper dental flossing instruction, inappropriate selection of study groups). It was also found that professional flossing was not administered in the majority of the studies. Without the application of professional flossing, proper technique and standardization in flossing procedures cannot be controlled. It is important that a study be performed where professional flossing and valid clinical parameters are used.

Conclusions

The etiological relation between bacterial plaque and gingival disease has been demonstrated in former studies. (Arnim, Bahn, Loe^{1,21,2}).

Due to deficiencies in research design, the literature to date does not indicate conclusively that the procedure of dental flossing alone controls gingival disease.

Proper evaluation of the efficacy of dental floss in the control of gingival disease requires further research using professional flossing procedures and proper research methods.

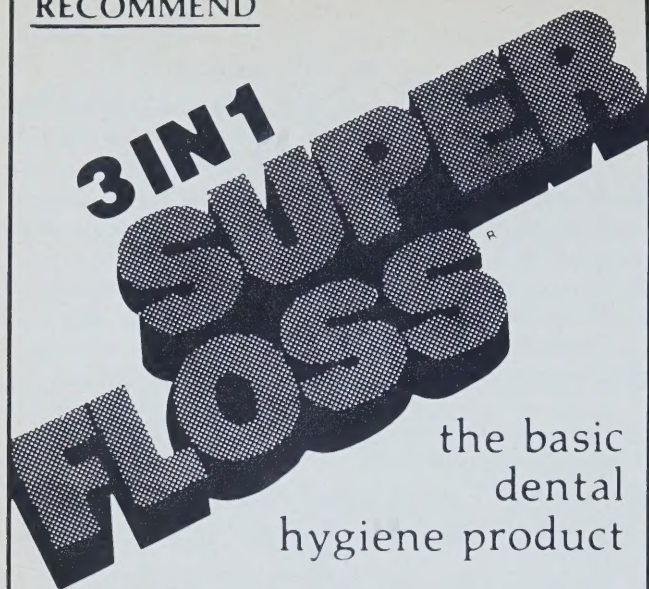
References

1. Arnim, S.S. Thoughts concerning cause, pathogenesis, treatment and prevention of periodontal disease. *J. Periodont.*, 29:217, 1958.
2. Loe, H., Theiland, E., and Jensen, S.B. Experimental gingivitis in man. *J. Periodont.*, 36:177, 1965.
3. Boudreaux, R.E. Jr. Effects of the use of embroidery thread and unwaxed floss on interdental gingiva. A short-term clinical and microscopic study. *J. La Dent. Assoc.*, 35(3):16-21, Fall 1977.
4. Carter, H.G., et al. Effects of using various types of dental floss on gingival sulcular bleeding. *Va. Dent. J.*, 52(1):18, Feb. 1975.

5. French, C.I. and Friedman, L.A. Plaque removal ability of waxed and unwaxed dental floss. *Dent. Hyg.*, 49(10):449, Oct. 1975.
6. Larato, D.C. Oral hygiene aids and restorative procedures related to interproximal tissue health. *J. Wis. D. Assoc.*, 46:344, 1970.
7. Mohammed, O.I., and Monserrate, Victor. Dental plaque removal by floss. *J. New Jersey Dent. Soc.* 36(10):419, 1965.
8. Carter, H.G., et al. Effect of professional flossing on bleeding gingiva. Abstra. 837, *J. Dent. Res.*, 50:256, 1972.
9. Finkelstein, Paul and Grossman, Eli. Effectiveness of dental floss in reducing gingival inflammation. *J. Dent. Res.*, 58(3):1034-9, March 1979.
10. Thomas, L.O. Flossing: the great American hoax? *J. La Dent. Assoc.*, 31:7-12, Spring 1974.
11. Prince, J.P. Lingual flossing. *J. Acad. Gen. Dent.*, 21:39, Jan. 1973.
12. Richardson, J.L. Mechanical plaque control — A review of the literature. *J. Am. Soc. Prev. Dent.*, 5(2):24-9, 42, 1975.
13. Zarkowski, Pamela. Effectiveness of dental floss in oral hygiene practice. *Dent. Hyg.*, 53(2):67-72, Feb. 1979.
14. Godin, M. Tension exerted in dental flossing. *Probe*, 19(7):297-8, Jan. 1978.
15. Gjermo, P., and Flotra, L. The effect of different methods of interdental cleaning. *J. Periodont. Res.*, 5:230-36, 1970.
16. Hill, H.C., et al. The effects of waxed and unwaxed dental floss on interdental plaque accumulation and interdental gingival health. *J. Periodont.*, 44:411-3, Jul. 1973.
17. Bergenholtz, A., et al. The plaque-removing ability of some common interdental aids: An intraindividual study. *J. Clin. Periodontol.*, 1(3): 160-5, 1974.
18. Vogel, R.I., et al. Evaluation of cleansing devices in the maintenance of interproximal gingival health. *J. Periodont.*, 46:745, 1975.
19. Wolffe, G.N. An evaluation of proximal surface cleansing agents. *J. Clin. Periodontol.*, 3(3):148-56, Aug. 1976.
20. Radentz, W.H. An evaluation of two techniques of teaching proper dental flossing procedures. *J. Periodont.*, 44(3):177-82, March 1973.
21. Bahn, A.N. Microbial potential in the etiology of periodontal disease. *J. Periodont.*, 41:603, 1970. □

About the authors: Maureen Vercaigne is a recent graduate of the University of Manitoba, School of Dental Hygiene and now works in private practice. Shirley Gelskey is the Director of the School of Dental Hygiene, University of Manitoba.

RECOMMEND



THREADER

FILAMENT BRUSH

UNWAXED FLOSS

SUPER FLOSS provides both a floss and a special filament brush for removal and clearance of plaque and food debris from interproximal spaces. *Removal and clearance* of plaque and food debris are the complementary elements of maximum efficacy.

Now clinically proven
superior to regular
dental floss by leading
American and
European University —
Dental Schools

The SUPER FLOSS filament brush is constructed of 204 tiny nylon filament "springs". These filament springs become straight and parallel with either elongation or lateral forces. The result is a brush that can compress down to the diameter of the floss section in order to clear out smaller interproximal spaces. The filament springs automatically revert to a coiled state when relaxed. The result is a brush with a "memory" characteristic and allows for repeat usage and good durability.

PROFESSIONAL PRICE LIST

Patient Pack - \$119.00 - 144 instruction
printed poly bags of 30 cleaners each
(4320 cleaners)

Pro-Pack - \$21.95 - 2 poly bags of 500
cleaners each.

Now available at drug stores. Patients
can order directly by mail.



marpo-dent products

10569 - 111. Street,
Edmonton, Alberta. T5H 3E8
Phone (403) 426 3720

DENTAL HYGIENISTS LOCAL BOARD OF HEALTH DENTAL DIVISION

Applicants are invited from Dental Hygienists to join the Calgary Health District Dental Division, as an important member of a highly qualified Dental Team working to improve the health of the community.

ACTIVITIES:

- A. Health Education - includes working in close liaison with dentists, public health nurses, teachers and parents.
- B. Administration - includes record keeping, compilation of records, control of supplies and other office duties.
- C. Technical Activities - includes dental inspection and referral of children, dental prophylaxis and topical fluoride therapy.
- D. Community Relations - includes activities with other agencies and organized local groups or committees.

QUALIFICATIONS: The candidate must have a University Diploma in Dental Hygiene or equivalent. Registration in Alberta is also a requirement.

The ability to work as a cohesive member of a team and a genuine interest in serving people are definite requirements.

SALARY: Negotiable depending on qualifications and experience.

FRINGE BENEFITS: Include medical, dental, and group life coverage. Four weeks annual vacation after one year's service, plus other excellent employee benefits.

For further information and application forms qualified applicants are invited to contact, **in confidence:**



Director,
Dental Health Services
Local Board of Health
Union Centre Bldg.
(2nd floor)
120 - 17th Ave. S.W.
Calgary, Alberta T2S 2T2
Phone:
(403) 269-8800 (L231)

LBH-215

762271-12-

Mean Change in Scores ($\pm$ Standard Deviation):

	<u>Between Initial and First Post Exam</u>	<u>Between Initial and Second Post Exam</u>
Personal	-0.28 ± 5.05	$+0.81 \pm 5.58$
videotape	-0.48 ± 6.38	-3.16 ± 6.35
control	-1.38 ± 4.61	-1.53 ± 5.17

TABLE 2.

Analysis of Variance – Initial Examination

<u>Source of Variation</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Variance Estimate</u>	<u>Variance Ratio (F)</u>
Between Groups	2	21.22	10.61	0.36
Within Groups	88	2581.77	29.34	
Total	90	2602.99		

TABLE 3.

Analysis of Variance – Change in Scores Between Initial and First Post-Intervention Examinations

<u>Source of Variation</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Variance Estimate</u>	<u>Variance Ratio (F)</u>
Between Groups	2	22.45	11.23	0.40
Within Groups	88	2468.74	28.05	
Total	90	2491.19		

TABLE 4.

Analysis of Variance – Change in Scores Between Initial and Second Post-Intervention Examinations

<u>Source of Variance</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Variance Estimate</u>	<u>Variance Ratio (F)</u>
Between Groups	2	229.15	114.58	3.58
Within Groups	88	2814.70	31.99	
Total	90	3043.85		

Self Assessment Test

The 1982 series of Self-Assessment Tests are provided by dental hygiene educators from Ontario community colleges.
*The first test reviews **Dental Epidemiology**.*

1. A dental or periodontal index can be used to measure the dental and/or oral health of:
 - a) a large group of children
 - b) a small group of children
 - c) individual children
 - d) a and b
 - e) a, b and c
2. The Gingival Index (GI) was designed to assess:
 - a) gingival inflammation
 - b) gingival bleeding
 - c) gingival inflammation and gingival recession
 - d) gingival inflammation and gingival bleeding
3. For the Simplified Oral Hygiene Index (OHI-S), what is the minimum of tooth surfaces per tooth that must be measured?
 - a) 6
 - b) 4
 - c) 2
 - d) 1
4. When measuring the DMFT of a patient, the following instrument(s) are used:
 - a) mirror
 - b) periodontal probe
 - c) explorer
 - d) a and b
 - e) a and c
5. Which of the following series of teeth are ideally suited to measure when scoring a dental or periodontal index?

a) 18	25	14	38	45	44
b) 16	12	21	36	32	41
c) 16	25	21	36	44	41
d) 26	27	23	36	37	33
6. If 65% of all children in a city had a filling by age 7 this would be considered:
 - a) a mortality rate
 - b) a morbidity rate
 - c) an epidemic rate
 - d) an endemic rate
7. A group of one kind of thing sharing a common quality or characteristic is referred to as:
 - a) resource
 - b) community
 - c) society
 - d) population
8. Control groups are important in clinical epidemiological studies as a means of:
 - a) ensuring that samples selected for study are representative of the total population
 - b) enabling standardization of examiners to help ensure consistency of examiner results
 - c) providing a basis for comparison in evaluating the effectiveness of a test procedure
 - d) all of the above
9. The most important factor to consider when several examining teams are to participate in a survey is:
 - a) sterilization of all instruments used
 - b) repetition of subjects
 - c) equal number of subjects per team
 - d) uniformity in diagnosis and recording
10. The primary limitation of a school dental inspection program is:
 - a) parents tend to depend on the school exam rather than seek periodic exams at the dental office
 - b) parents tend to disapprove of the school exam because they are unsure of the quality of the exam being performed
 - c) parents tend to question the efficacy of school exam program due to the number of children being examined and, therefore, can withdraw their support
 - d) all of the above
 - e) none of the above

Susan Isaac, B.Sc.
 Co-ordinator Dental Hygiene
 St. Clair College

Answers to Self-Assessment Test:	1. e	2. d	3. c	4. c	5. c	6. b	7. d	8. c	9. d	10. a
----------------------------------	------	------	------	------	------	------	------	------	------	-------

alternatives



Consultant Dental Health Services Ministry of Health

*Donna Gunther,
R.D.H., B.Sc.D.*

The basic purpose of this series of articles is to share with the reader some highlights related to the daily job duties in positions that may be considered "different" from traditional dental hygiene. Throughout this article, I hope also to share a philosophy about dental public health and dental hygiene careers within the Ministry of Health, Province of British Columbia.

The position of the Consultant, Dental Health Services was established in 1975. This, for myself, was the culmination of a career that began 15 years ago as a result of a recruitment letter directed to hygienists in Western Canada from a public health dentist in the Okanagan Region. This letter invited applications from enthusiastic hygienists looking for a job that was exciting, challenging, and "different" from the usual. In 1966, I had no idea that a career pathway would progress from a Staff Hygienist to a Regional Supervisor then on to a Consultant and that, indeed, all the positions would be so different, so challenging, and so absorbing.

The job duties of this position centre around the overall development and promotion of policies, standards and guidelines for preventive dental programs, and staff operating throughout the provincial health units. It also focuses upon labour/management relations, staff recruitment and selection, training and development, appraisals, reclassifications, grievances, development of equipment, supplies and educational materials for field staff, and the provision of professional/technical standards.

No one day, like many "consultant" type jobs, can be described as typical. However, one can extract various days out of a week to provide the reader with a glimpse of what the job is all about.

For instance, it's a beautiful day overlooking the Gulf Islands at 6,000

feet in one of British Columbia's Cessna Citations. The Consultant is on the 7:30 a.m. flight from Victoria to Vancouver in order to be a panel member for the selection of a new employee. This process will take most of the day and a return trip will be made at dusk on the 6:15 p.m. flight. The following day all the activities that allow the selected candidate to become an employee will be coordinated with the Personnel and Public Service Commission branches of the Ministry of Health. This will bring the central recruitment and selection duties to a close after what could have been months of preparatory work. Recruitment usually begins with: the Consultant speaking about job opportunities at universities, colleges, conventions, professional associations; writing job advertisements for newspapers and journals across Canada; developing career brochures and maintaining liaison with placement services and executives of professional associations.

The next travelling day is to one of the elementary schools in a health unit. Here, on-site observation would take place where the staff dental hygienists and assistants would provide the educational, motivational, and preventive services in the classroom. The Consultant would also collaborate with hygienists and dentists to provide a pool of standardized information on dental health levels of children. Input related to the professional/dental aspects of the job, as well as competencies in classroom teaching skills, would be provided for staff appraisals.

Another day focuses on dealing with the backlog of telephone calls and correspondence. Afterwards, an agenda and a budget must be developed for an upcoming three-day Regional Supervisors' Meeting. Speakers must be located for such topics as financial management and budget preparation, employee relations, statistics and pro-

gram planning. Later that day, the final touches would be put on a new pamphlet, and a meeting would be held with Nursing Consultants on the dental component of a new perinatal survey.

In short, the Consultant who reports to the Director of Dental Services is responsible to help ensure that quality and cost-effective preventive programs are delivered to the community, and that both such programs and staff operate efficiently and effectively. She also provides professional assistance to outside agencies and works with other senior management in establishing common goals and objectives.

The experiences and training required for this particular position come from one very important place — actual proven ability to perform real and measurable work in the community. This is the very best "teacher". Once you discover you have been the person responsible for getting many school children to the dentist, persuaded many parents to move dentistry up on their priority list, or influenced many of the elderly to maintain daily oral hygiene, then you have "arrived" as a public health hygienist. What is even better, no one can take these rewards of helping others and being a useful person in the community away from you. The possibilities for future growth and development as a health professional can only go upward from this point. Combine these positive "hands-on" skills and experiences with formal education in preventive dentistry, personnel administration, and general public health and you have a basic framework to provide motivation, support, assistance, and leadership for both your own staff and the community.

Naturally, to develop these practical skills and knowledge in the first place requires that one belong to an organization that has an identity with a fundamental and clear purpose, a focus on achievement and evaluation, and, ultimately, wishes to provide quality services to people.

It has been exciting to have been a hygienist in this situation. I have been fortunate to have belonged to such an organization and to share in its successes. Even after this length of time, there are more changes and challenges to meet, particularly with oral nursing for the institutionalized patient and the elderly people of this province. At any stage of our career pathway, be it Staff Hygienist, Supervisor, or Consultant, unique opportunities exist for hygienists to explore and develop both personal and professional aspirations. □

1981-82 directory

EXECUTIVE COUNCIL:

- **PRESIDENT:** Patricia Grant, 3 Linden Lane, Halifax, Nova Scotia B3R 1N1. Res. (902-477-9876) Bus. (902-453-4761).
- **PRESIDENT ELECT:** Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ontario L4W 2B7. Res. (416-624-3495).
- **FIRST VICE-PRESIDENT:** Mary Pelletier, Box 18, Site 5, R.R. 7, Moncton, New Brunswick E1C 8Z4. Res. (506-384-8728).
- **SECRETARY:** Peggy Larder, 6150 Regina Terrace, Halifax, Nova Scotia B3H 1N5. Res. (902-429-4166) Bus. (902-424-2279).
- **TREASURER:** Debbie Mitton, 93 Chandler Drive, Lower Sackville, Nova Scotia B4C 3C6. Res. (902-865-5626) Bus. (902-429-0479).
- **IMMEDIATE PAST PRESIDENT:** Margaret Bailey, Box 2228, Kindersley, Saskatchewan S0L 1S0. Res. (306-463-2397) Bus. (306-463-4661).

THE BOARD OF DIRECTORS:

- **BRITISH COLUMBIA:** Yvonne Smith, R.R. 3, Gartley Beach, Courtenay, B.C. V9N 5M8 (604-338-6470); Marie Goldfinch, 46274 Princess Ave. East, Chilliwack, B.C. V2P 2A9 (604-792-3156); Sue Sumi, 7077 - 18th Ave., Burnaby, B.C. V3N 1G9 (604-521-5184); Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- **ALBERTA:** Laura Mowat, 11424-161 Avenue, Edmonton, Alberta T5X 2L1 (403-456-0977); Vicki Duncanson, 1629 - 20 Ave. N.W., Calgary, Alberta T2M 1G9 (403-284-2628).
- **SASKATCHEWAN:** Barbara Ferris, 5107-222 Fairmont Drive, Saskatoon, Saskatchewan S7M 4P5 (306-382-3348).
- **MANITOBA:** Gladys Stewart, 454 Niagara St., Winnipeg, Man. R3N 0V5 (204-453-1574).
- **ONTARIO:** Judy Barnes, 74 Keewatin Avenue, Toronto, Ontario M4P 1Z8 (416-481-7507); Linda McCance, 5027 Wixon Street, Clairmont, Ontario L0H 1S0 (416-649-2056); Ailsa Wood, 505-160 Balmoral Avenue, Toronto, Ontario M4V 1J7 (416-923-1669); Rosemary Arsenaault, 92-B McDougall Rd., Waterloo, Ontario N2L 5C5 (519-884-4216); Dale Scanlan, 53 Ariel Court, Nepean, Ont. K2H 8J1 (613-828-7962); Linda Perron, 712-101 Governor's Road, Dundas, Ontario L9H 6L7 (416-627-7193); Susan Leroux Knox, 3558 Dawson Road, Thunder Bay, Ontario (807-767-1358); Carolyn Roth, 184 Greenbrook Drive, Kitchener, Ontario N2M 4J7 (519-745-6664); Lise Thom, Box 293, Russell, Ontario K0A 3B0 (613-445-2892); Fern Waldman, 2008-3303 Don Mills Road, Willowdale, Ontario M2J 4T6 (416-493-1811).
- **QUEBEC:** Lucie Billette-Raychat, 4641 Cumberland Street, Montreal, Quebec H4H 2L5.
- **NEW BRUNSWICK:** Trudy McAvity, Box 947, Rothesay, N.B. E0G 2W0 (506-847-5502).
- **NOVA SCOTIA:** Peggy Larder, 6150 Regina Terrace, Halifax, N.S. B3H 1N5 (902-429-4166); Lisa Macdonald, 3450 St. Andrews Avenue, Halifax, N.S.
- **PRINCE EDWARD ISLAND:** Jean MacLean, 6 Newland Crescent, Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- **NEWFOUNDLAND:** Ingrid Curtis, 67 Roche Street, St. John's, Nfld. A1B 1L9 (709-722-1603).

SPECIAL COMMITTEE CHAIRMEN:

- **CONTINUING EDUCATION:** Marnie Forgay, 780 Bannatyne Ave., Winnipeg, Manitoba R3E 0W3 (204-786-3683).
- **EDUCATION:** Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4 (204-889-4890).
- **FINANCE:** Debbie Milton, 93 Chandler Drive, Lower Sackville, Nova Scotia B4C 3C6.
- **STUDENT MEMBERSHIP:** Cara Tax, 883 Campbell Street, Winnipeg, Manitoba R2Y 1C1 (204-889-6372).

APPOINTIVE OFFICERS:

- **EXECUTIVE SECRETARY:** Thora Appelt, 2136 Fillmore Crescent, Ottawa, Ontario K1J 6A4 (614-746-6455).
- **EDITOR:** Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2 (519-254-6224).
- **BOOKKEEPER:** Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (416-923-1669).

EXECUTIVE APPOINTMENTS:

- **SPEAKER FOR THE BOARD:** Ms. Joanne Clovis, #1-14310 - 80 Street, Edmonton, Alberta T5C 1L6 (403-476-6596).
- **CONVENTION CHAIRMAN:** 1982: Maureen Donoghue, 1904-57 Charles St. West, Toronto, Ont. M5S 2X1 (416-925-5706).
- **A.C.F.D. DENTAL HYGIENE:** Kate MacDonald, 3914 Novalea St., Halifax, N.S. B3K 3G7 (902-445-8868).
- **DENTAL AUXILIARY LIAISON OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Saskatchewan, S4T 1L6 (306-569-1603).
- **INTERNATIONAL LIAISON CHAIRMAN:** Sharon French, 39 Chinook Cres., Nepean, Ontario K2H 7C9 (613-820-1196).
- **DATA BANK REPRESENTATIVE:** Pat Johnson, Oak Deane, R.R. 2, Aurora, Ontario L4G 3C8 (416-727-1433).
- **CDA COUNCIL ON HEALTH CARE:** Kate MacDonald, 3914 Novalea St., Halifax, N.S. B3K 3G7 (902-445-8868).
- **CDA COUNCIL ON EDUCATION:** Margaret Miller, 340 Overdale St., Winnipeg, Manitoba R3J 2G4 (204-889-4890).
- **CSA TECHNICAL COMMITTEE ON DENTISTRY:** Anne Bosy, 1529 Ballyclare Drive, Mississauga, Ontario L5C 1J4 (416-270-4019).
- **OFFICER OF CDHA ORGANIZATION AND PROCEDURES:** Marjorie Dimitri, 1606 Ayleslynn Drive, North Vancouver, B.C. V7J 2T3 (604-987-7392).
- **PORTABILITY OFFICER:** Elaine Good, 262 Anita Court, Waterloo, Ontario N2K 2R4 (519-885-6225).

STANDING COMMITTEES:

MEMBERSHIP:

- **CHAIRMAN:** Jo Gardner, 1125 West 54th Ave., Vancouver, B.C. V6P 1N3 (604-261-8642).
- **B.C.:** Casseda Parsons, 1049 West Keith Rd., North Vancouver, B.C. V7P 1Y6 (604-986-4620).

- **Alta.:** Linda Ewanovich, 128 Glenpatrick Dr. S.W., Calgary, Alta. T3E 4L6 (403-242-3465).
- **Sask.:** Darlene Armstrong, 43-35 Centennial St., Regina, Saskatchewan S4S 6P8 (306-586-9457).
- **Man.:** Darlene Armstrong, 43-35 Centennial St., Regina, Saskatchewan S4S 6P8 (306-586-9457).
- **Ont.:** Kathleen Feres-Patry, 10C Stonehill Crt., Kanata, Ont. K2M 1G2 (613-592-5934).
- **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-488-3743).
- **N.B.:** Jean McGinis, 112 Marianne Dr. Rothesay, N.B. E0G 2W0 (506-849-2240).
- **N.S.:** Diane Dobson, 242 Duke Street, Apt. 1, Chester, N.S. B0J 1J0.
- **P.E.I.:** Florence Wall, Mt. Herbert, R.R. 1, Charlottetown, P.E.I. C1A 7J8 (902-568-2079).
- **Nfld.:** Coleen Thomey, 257 Lemarchant Rd. St. John's, Nfld.

MANPOWER AND UTILIZATION:

- **CHAIRMAN:** Jenny Thomas, 2759 Salir Street, Ottawa, Ont. K2B 6P8 (613-820-0405).
- **B.C.:** Randy McIlraith, 1201-2015 Nelson St. Vancouver, B.C. V6G 1N6.
- **Alta.:** Ila Seabrook, 54 Woodlake Cres., Sherwood Park, Alta. (403-467-1730).
- **Sask.:** Bev Upton, 143 Bothwell Cres., Regina, Sask. S4R 5Y7 (206-545-7563).
- **Man.:** Ruth Konzelman, 105 Olivier Ave. Selkirk, Man. R1A 0C4 (204-482-6112).
- **Ont.:** Jenny Thomas, 2759 Selina Street, Ottawa, Ontario K2B 6P8 (613-820-0405).
- **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Quebec. H4H 2L5 (514-486-3743).
- **N.B.:** Sharyn Milroy, 85 Oakmore Ter. Moncton, N.B. E1G 1T4 (506-384-1961).
- **N.S.:** Linda Zambolin, 114 Regal Rd. Dartmouth, N.S. B2W 4H8 (902-434-8983).
- **P.E.I.:** Heather Keith, 4 Belvedere Ave., Charlottetown, P.E.I. C1A 6A8 (902-892-9361).
- **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).

COMMUNITY DENTAL HEALTH:

- **CHAIRMAN:** Dale Scanlan, 53 Ariel Court, Nepean, Ontario K2H 8J1 (613-828-7962).
- **B.C.:** Karen Fawley, 305-252 W. 2nd St. North Vancouver, B.C. V7M 1C8 (604-983-7621).
- **Alta.:** Joanne Clovis, 1-14310 80 St., Edmonton, Alberta T5C 1L6 (403-476-6596).
- **Sask.:** Maureen Bowerman, 51 Huron Place, Saskatoon, Sask. S7K 4E8 (306-664-3081).
- **Sharon McLean, 1400 Argyle St., Regina Sask. S4T 3S1 (306-525-3289).**
- **Man.:** Ruth Konzelman, 105 Oliver Ave., Selkirk, Man. R1A 0C4 (902-482-6122).
- **Ont.:** Cheryl Barrett, 238 Hodgson Dr., Nepean, Ont. L3Y 1E2 (416-895-8440).
- **Que.:** Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2L5 (514-352-6245).
- **N.B.:** Barbara Ash, Dept. of Health, P.O. Box 93, St. John, N.B. E2L 3X1 (506-658-2531).
- **N.S.:** Terry Mitchell, 1676 Larch St., Apt. 2, Halifax, N.S. B3X 3X1.
- **P.E.I.:** Pat Stewart, Travellers Rest, Summerside, P.E.I. (902-436-2709).

Nfld.: Lois Bowden, 189 LeMarchant Rd., St. John's, Nfld. A1C 2H5 (709-579-3259).

DOMINATIONS:

CHAIRMAN: Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ont. L4W 2B7 (416-624-3495).

B.C.: Evelyn McNee, 1509 Lynn Valey Rd., North Vancouver, B.C. V7J 2V1 (604-987-821).

Alta.: Paulette Schulte, 10947 - 36A Ave., Edmonton, Alta. T6J 0E3 (403-434-0925).

Sask.: Barb Long, 2741 Preston Ave., Saskatoon, Sask. S7G 3G2 (306-373-7434).

Man.: Kim Harrop, 658 Government Ave., Winnipeg, Man. R2K 1X2 (514-667-0831).

Ont.: Dale Scanlan, 53 Ariel Ct., Nepean, Ont. K2H 8J1 (613-828-7962).

Que.: Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-743).

N.B.: Pam Mosher, 1064 Salisbury Rd., Moncton, N.B. E1E 3V6 (506-855-2815).

N.S.: Yolanda Bresolin, 16½ Sunset Court, Truro, N.S. B2N 3W1.

P.E.I.: Jean MacLean, 6 Newland Cres., Charlottetown, P.E.I. C1A 4H5 (902-894-294).

Nfld.: Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).

INSTITUTION:

CHAIRMAN: Mary Pelletier, Box 18, Site 5, R.R. 3, Moncton, New Brunswick E1C 8Z4 (506-855-2815).

B.C.: Yvonne Smith, R.R. 3, Gartley Beach, Courtenay, B.C. V9N 5M8 (604-338-6470).

Alta.: Marg Wilson, 8739 - 67 Ave., Edmonton, Alta. T6J 0E3 (403-434-0925).

Sask.: Joan Foster, 545 Laurier Drive, Swift Current, Sask. S9H 1L3 (306-713-8754).

Man.: Louise Dufault, 82 Reil St., Winnipeg, Man. R2M 0Y2 (204-256-9115).

Ont.: Jasmine Holetich, 1871 King E., Hamilton, Ont. L8K 1V1 (416-549-5048, 525-9140).

Que.: Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-743, 937-0511).

N.B.: Sue Breen, Castle Acres, Comp. 28, S.S. 3, Fredericton, N.B. (506-855-2815).

N.S.: Linda Zambolin, 114 Regal Road, Dartmouth, N.S. B2W 4H8 (902-434-8983).

Nfld.: Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).

P.E.I.: Debbie Richard, 19 Milbrooke Dr., Charlottetown, P.E.I. C1A 7V2 (902-569-490).

PROVINCIAL NEWSLETTER EDITORS:

B.C.: Pat Bowman, 926 W. 22nd Ave., Vancouver, B.C. V5Z 2A1 (604-736-0962).

Alta.: Adeline Fioriollo, 8911 - 138 Ave., Edmonton, Alta. T5E 2A7.

Sask.: Teri Gottselig, 98 Lockwood Rd., Regina, Saskatchewan S4S 3G2 (306-525-1136).

Man.: Joanne Presunka, 139 Hawkins, Winnipeg, Man., R2N 1H9 (204-254-8203).

Ont.: Jane Rogers, 10 Lyle Place, Kitchener, Ontario N2B 2J6 (519-576-3718).

Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1 (514-352-6245).

N.B.: Nancy Mills, 20 Wilson Rd., Riverview, N.B. E1B 2V8 (506-386-3734).

N.S.: Diane Forrest, 209-7 Parker St., Dartmouth, N.S.; Cindy Forward, Oyster Pond, Jeddore, N.S.

Nfld.: Pam Vokey, P.O. Box 205, Gander, Newfoundland A1V 1W6.

P.E.I.: Frances Piercy, 3 Sunset Drive, Charlottetown, P.E.I. C1A 3J6.

SURVEY Dental Hygiene Researchers

The Sub-Committee on Research, Working Group on the Practice of Dental Hygiene would like to determine which dental hygienists in Canada have been involved in research in Canada. If you have graduated as a dental hygienist and have been or will be involved in research, please complete the following form and return to:

Mrs. S.B. French
Adviser, Dental Health Standards
Health Services Directorate
Department of National Health and Welfare
Ottawa, Ontario
K1A 1B4

Name _____
(FIRST) (MIDDLE) (LAST)

Address _____
(NUMBER AND STREET)

(CITY) (PROVINCE) (POSTAL CODE)

Employer/Affiliation _____

Please indicate your research status:

- ☐ I am currently involved in research.
☐ I have participated in research in the past.
☐ I am pursuing a degree program which involves research.
☐ I will be involved in research in the near future.

n.b. Attach resumé or c.v., if possible, including summary of research.

DENTAL HYGIENE RESEARCH CONFERENCE

DATES Thursday and Friday
September 30 and October 1, 1982

LOCATION: University of Manitoba
Winnipeg, Manitoba

KEYNOTE
SPEAKERS:

International leaders in dental and dental hygiene research as well as other health disciplines will focus in on topics such as how to start off on the right foot, funding agencies, dental hygiene research and researchers in the USA, educational research, health and manpower issues, and research on services for special groups.

WHO MAY
ATTEND:

Invited dental hygienists and others who have an interest in dental hygiene research. If you are interested in participating, write to:

Mrs. Marnie Forgay
Professor, School of Dental Hygiene
Faculty of Dentistry,
University of Manitoba
780 Bannatyne Avenue
Winnipeg, Manitoba
R3E 0W3

REGISTRATION
DEADLINE: June 30, 1982

FINANCIAL HELP
FOR PARTICIPANTS: Invited participants and a limited number of other participants may be able to receive financial support to attend the conference, depending upon available funds.

CONFERENCE
FUNDING: Requests for funding the conference are being submitted to a number of national agencies and associations including the National Health Research and Development Program, the Canadian Dental Hygienists' Association, the Canadian Fund for Dental Education as well as the University of Manitoba.

CDHA—ODHA NATIONAL CONVENTION

MAY 9 – MAY 12, 1982

HOLIDAY INN DOWNTOWN 89 CHESTNUT STREET TORONTO, ONTARIO M5G 1R1

REGISTRATION FORM

Plan NOW to attend. Register early before April 23, 1982 and SAVE. Overnight accommodation is available at convention rates. Reserve early.

Please complete the following. Read carefully and check what days and/or functions you wish to attend. Receipts will be given at Convention.

Name _____

Phone: Office _____

Address _____

Home _____

City _____ Province _____

Postal Code _____

Enclosed: CDHA Member \$ _____

Student Member \$ _____

Non-Member \$ _____

(Convention Registration fee is double)

Send completed registration form to:
The Ontario Dental Hygienists' Association
104-237 Locke Street South
Hamilton, Ontario L8P 4P8

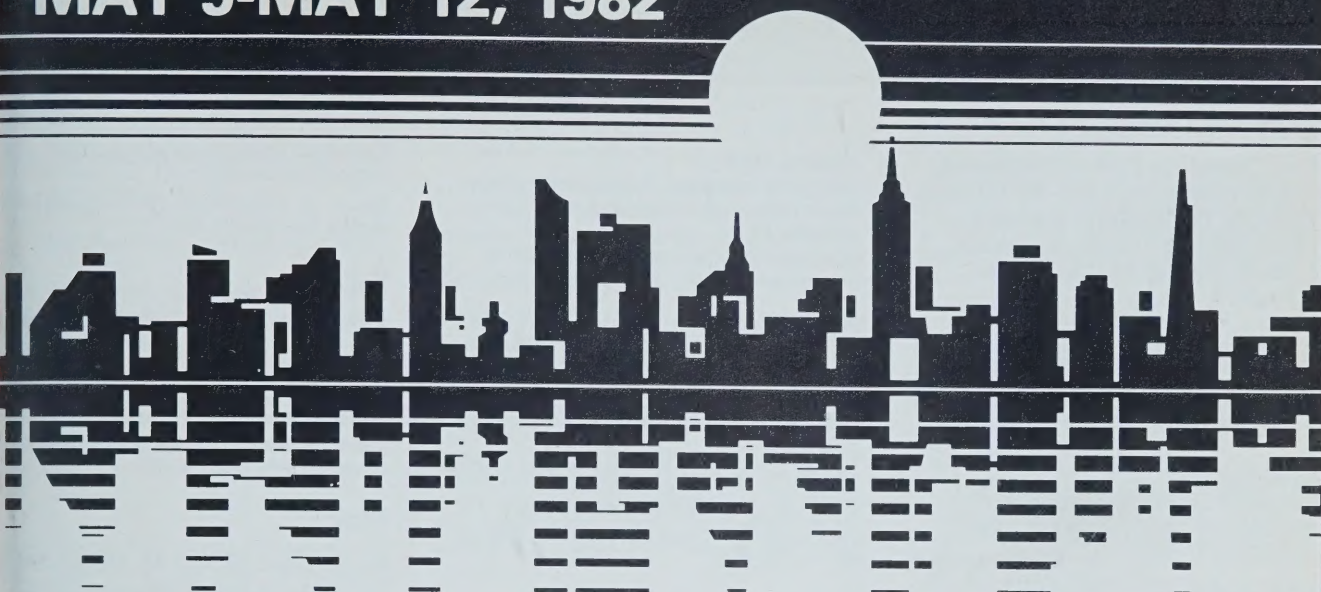
	Early Registration	Late Registration
C.D.H.A. Member	3 Days \$110.00 1 Day \$50.00 Monday, May 10 Tuesday, May 11 Wednesday, May 12	3 Days \$130.00 1 Day \$60.00
Student Member	3 Days \$80.00 1 Day \$35.00 Monday, May 10 Tuesday, May 11 Wednesday, May 12	3 Days \$105.00 1 Day \$50.00
Non Members	3 Days \$220.00 1 Day \$100.00 Monday, May 10 Tuesday, May 11 Wednesday, May 12	3 Days \$260.00 1 Day \$120.00

Convention Activities: Please check those events you wish to attend.

- _____ May 9, Sunday Evening
Gala Fashion Show and Get-Acquainted Evening
Complimentary with the 3-day registration or any single day registration. Guest tickets available at the door.
- _____ May 10, Monday Luncheon
Tour downtown Toronto aboard a vintage Peter Witt, 1920's, Trolley Car. Box lunch supplied by Movenpick Restaurant. Please note that attendance is limited so please get the registration form in early to avoid disappointment. Regular luncheon arrangements at Holiday Inn Downtown. Complimentary with 3-day registration or Monday registration.
- _____ May 10, Monday Evening
Mariposa Belle Cruise and Buffet
Complimentary with 3-day registration or Monday registration. Guest tickets will be available at registration desk.
- _____ May 12, Wednesday Morning
Wind-Up Breakfast, Top of Toronto, Revolving Restaurant, CN Tower
Complimentary with 3-day registration or Wednesday registration.

CDHA-ODHA NATIONAL CONVENTION

MAY 9-MAY 12, 1982



PRE-CONVENTION EVENTS

FRIDAY, MAY 7, 1982

- 9:00 a.m.-10:30 a.m.Finance Meeting
 10:45 a.m.-3:00 p.m.Open Forum
 3:45 p.m.-6:00 p.m.CDHA Board of Directors
 Annual Meeting

SATURDAY, MAY 8, 1982

- 9:00 a.m.-5:00 p.m.CDHA Board of Directors
 Annual Meeting Cont'd.

SUNDAY, MAY 9, 1982

- 9:00 a.m.-1:00 p.m.CDHA Board of Directors
 Annual Meeting Cont'd.
 9:00 a.m.-5:00 p.m.Educator's Workshop
 10:00 a.m.Family Fun Runnnnnn
 Sunnybrook Park
 Registration — ODA Desk,
 Sheraton Centre
 4:00 p.m.-8:00 p.m.Registration:
 Floating World
 7:00 p.m.-9:30 p.m.Gala Fashion Show and
 Get Acquainted Night:
 Floating World
 Sponsored by Dewars
 Liquors, makers of Pimms

CONVENTION PROGRAM

MONDAY, MAY 10, 1982

- 8:00 a.m.-12:00 p.m.Registration:
 Commonwealth C & W
 9:15 a.m.-11:45 a.m.Dr. L. Gilka
 "Additives and Allergies"
 12:15 p.m.-1:30 p.m.Luncheon or
 Trolley Lunch Tour of
 Toronto aboard a vintage
 Peter Witt, 1920's trolley
 car, Box Lunch by
 Movenpick Restaurant
 2:00 p.m.-3:00 p.m.Dale Scanlan, RDH
 "Dentistry for the
 Handicapped"
 2:00 p.m.-3:00 p.m.Jenny Thomas, RDH
 "Periodontics" and
 "Manpower"

- 3:00 p.m.-4:00 p.m.Pat Johnson, RDH
 "Dental Hygiene Practice
 Settings — Is an
 Alternative in Your Future"
 3:00 p.m.-4:00 p.m.Barb Long, RDH
 "The Dental Therapist —
 Hygienist in an Academic
 Environment"
 4:15 p.m.ODHA General
 Membership Meeting
 7:00 p.m.-11:00 p.m.Dinner theatre with
 performance by Second
 City Cabaret — tickets
 available at ODA ticket
 booth

TUESDAY, MAY 11, 1982

- 8:00 a.m.-12:00 p.m.Registration:
 Commonwealth C & W
 9:15 a.m.-12:00 p.m.Dr. M. Borins
 "Holistic Medicine"
 12:30 p.m.Luncheon
 1:45 p.m.-3:00 p.m.Luncheon Guest Speaker:
 Dr. George Benjamin
 "15,000 Years Under
 the Sea"
 3:00 p.m.-5:00 p.m.Viewing Table Clinics
 and Commercial Exhibits
 6:30 p.m.-9:00 p.m.CDHA and ODHA Joint
 President's Reception
 9:00 p.m.-? p.m.ODA Disco Night

WEDNESDAY, MAY 12, 1982

- 7:00 a.m.-8:00 a.m.Registration:
 Floating World
 8:15 a.m. (sharp)
 9:30 a.m.Wind-up Breakfast
 Top of Toronto — CN
 Tower Revolving
 Restaurant sponsored by
 Colgate-Palmolive
 10:00 a.m.-12:00 p.m.Arlene Levin, RDH
 "Burnout in Dentistry"
 12:15 p.m.-1:15 p.m.Buffet Luncheon
 1:30 p.m.-3:30 p.m.Arlene Levin, RDH
 "Burnout in Dentistry
 Cont'd"

annual index

**The Canadian Dental Hygienist/
L'Hygieniste Dentaire du Canada**
Volume 15, January-December
1981, Spring 1:1-24, Summer
2:25-48, Fall 3:49-73, Winter
4:74-96

Subject Index

Anatomy

Temporomandibular Joint (self-assessment test), Larder, P. and Zambolin, L. 4:88

Book review

Comprehensive Dental Hygiene Care, McCabe, H. 2:40
Essentials for Periodontics, Jesin, E. 3:57

Canadian Dental Hygienists' Association

President's Message, Grant, P. 4:74
Convention '81: People and Events 4:83-86

Canadian Fund for Dental Education

October is CFDE/FCED Month 3:64

Dental Health Education

April is Dental Health Month (editorial), Scanlan, D. and McCambly, D. 1:1

Education

Attitude of Canadian Dental Hygienists toward Mandatory Continuing Education, Forgay, M. 4:90-94

Career Options in Dental Hygiene

MacDonald, K. and Miller, M. 1:10-13
Organizing Continuing Dental Education, Wong, J. 4:81-82

Epidemiology

Assessing the Oral Health Status of Rankin Inlet's Schoolchildren, Gelskey, S., and Hando-Lowes, P. 3:54-57

Fluoride

Fatal Incidents of Fluoride Intoxification, Golinsky, A. 1:14-16
Fluorides (self-assessment test), Butt, G. 1:9
Prophylaxis prior to Topical Fluoride Application: A Questionable Procedure? Nagle, S. 1:19-21

Membership

Special Membership Section 3:59-62

Pathology

What do you know about Lupus Erythematosus? Gutzmann, A. 3:66-68

Periodontics

Is the Periodontal Probe one of your Most Important Instruments? Voris, J. 2:30-31
Periodontal Instrumentation (self-assessment test), Macdonald, K. 2:42

Practice

Dental Hygiene at a Dental School, Bryant, D. 2:43-44
Providing Preventive Services for Native People of Canada, Hemming, S. 3:69-70
National Core of Functions and Duties Legally Performed by Dental Hygienists within the Canadian Provinces and the Territories, Miller, M. 2:33-38

Professional Concerns

Am I Too Sensitive? (editorial), Nagle, S. 2:26

Restorative Dentistry

Restorative Procedures and Materials (self-assessment test), Murphy, P. 3:58

Special Patient Care

Dental Hygiene in a Children's Hospital, Vause, S. 1:17-18
It's My Turn (editorial), Kolthammar, M. 3:50
Working with the Mentally Retarded, Kolthammar, M. 2:45-46

Author Index

A-F

Bryant, D. Dental Hygiene at a Dental School. 2:43-44
Butt, G. Fluorides (self-assessment test) 1:9
Forgay, M. Attitude of Canadian Dental Hygienists toward Mandatory Continuing Education. 4:90-94

G

Gelskey, S. and P. Hando-Lowes. Assessing the Oral Health Status of Rankin Inlet's Schoolchildren. 3:54-57
Golinsky, A. Fatal Incidents of Fluoride Intoxification. 1:14-16
Grant, P. President's Message. 4:74
Gutzmann, A. What do you know about Lupus Erythematosus? 3:66-68

H-J

Hando-Lowes, P. see Gelskey, S. 3:54-57
Hemming, S. Providing Preventive

Services for Native People of Canada 3:69-70

Jesin, E. Essentials for Periodontics (book review) 3:57

K-L

Kolthammar, M. It's My Turn (editorial) 3:50
Kolthammar, M. Working with the Mentally Retarded. 2:45-46
Larder, P. and **L. Zambolin.** Temporomandibular Joint (self-assessment test) 4:88

Mac

MacDonald, K. and **M. Miller.** Career Options in Dental Hygiene. 1:10-13
MacDonald, K. Periodontal Instrumentation (self-assessment test) 2:42

Mc

McCabe, H. Comprehensive Dental Hygiene Care (book review) 2:40
McCambly, D. see Scanlan, D. 1:1

M

Miller, M. National Core of Functions and Duties Legally Performed by Dental Hygienists within the Canadian Provinces and the Territories. 2:33-38
Miller, M. see MacDonald, K. 1:10-13
Murphy, P. Restorative Procedures and Materials (self-assessment test) 3:58

N-R

Nagle, S. Am I Too Sensitive? (editorial) 2:26
Nagle, S. Prophylaxis prior to Topical Fluoride Application: A Questionable Procedure? 1:19-21

S-U

Scanlan, D. and **D. McCambly.** April is Dental Health Month (editorial) 1:1

V

Vause, S. Dental Hygiene in a Children's Hospital. 1:17-18
Voris, J. Is the Periodontal Probe one of your Most Important Instruments? 2:30-31

W-Z

Wong, J. Organizing Continuing Dental Education. 4:81-82
Zambolin, L. see Larder, P. 4:88

Letters

Dear Editor:

I am very interested in the book entitled "Comprehensive Dental Hygiene", written about in your Summer 1981 edition of **The Canadian Dental Hygienist**, Volume 15, No. 2.

I would like to know where to order the ISBN number, publisher, author,

and feel this book could be very useful for our Dental Auxiliary Program here at Anagan College.

Thank you for your time and attention, and I'm looking forward to your response.

F. J. Kirpatrick
C.D.A.

Editor's note: This text can be ordered from: **The C.V. Mosby Company, 130 Westline Industrial Drive, St. Louis, Missouri, 63141; ISBN number: 016-5624-9; author: Woodall, Joe, Young, Weed-Fonner, and Yanl. Sorry, I don't know the cost.**

Dear Editor:

I just received my Winter '81 copy of **The Canadian Dental Hygienist**. Read-through it brightened a dull January day with memories of August in Gary.

The last two issues have not listed a "Nominations" person for Alberta in the '81-'82 Directory. The first time I read it was just a misprint, but now I realize it must be missing on the masthead. I am that nominations person for Alberta and thought that maybe I have been missing some correspondence as a result. I hope that it is not difficult to add my name to the list.

Paulette Schulte
R.D.H.

Original Hygiene Hasty Notes by Sue Scott©

To order your package of 8 notes
(4 different situations in all)
send your \$4.00 cheque or money order to:

**The Toronto Central Component
Dental Hygiene Society
Catherine Barlow
715 Don Mills Road
Apt. 2208
Don Mills, Ontario
M3C 1S5**

Classified Ads

DENTAL HYGIENIST required for a modern dental clinic with four dentists. Send resume to: Dr. Johnston, Suite 200, 1544 Marine Drive, West Vancouver, V7V 1H8.

HYGIENIST required urgently: Excellent remuneration. Part-timers accepted. Phone 1-902-895-6307 or write to: 96 Dominion Street, Truro, Nova Scotia. B2N 3P3.

ALBERTA DENTAL HYGIENISTS' ASSOCIATION ANNUAL CONVENTION June 9-12, 1982, Westin Hotel, Edmonton, Alberta.

BURNABY—Full time (4 days per week) dental hygienist required for preventative practice twenty minutes from downtown Vancouver. Dr. R. J. Nelson, #315-4900 Kingsway, Burnaby, B.C. V5H 2E3 Telephone (604) 434-3013.

TWO HYGIENISTS required for fully modern preventive clinic in Abbotsford, B.C., an hour from Vancouver. Ample opportunities for skiing, sailing and other recreation. Excellent remuneration. Applications to Dr. R. Chan, Abbotsford Dental Group, 33782 Marshall Rd., Abbotsford, B.C.

V2S 1L1. Office call collect (604) 853-4634.

UNIVERSITY OF MANITOBA SCHOOL OF DENTAL HYGIENE

The University of Manitoba, School of Dental Hygiene invites applications for a full-time term appointment. Responsibilities include co-ordination of course in pre-clinical and clinical dental hygiene; as well as didactic laboratory and clinical teaching. Candidates must be eligible to practise dental hygiene in Manitoba, have at least a Bachelor's degree (Master's preferred), and have experience in teaching and practice.

In accordance with Canadian Employment and Immigration policy, consideration in the first instance will be given only to Canadian citizens in permanent residence. Position is available July 15, 1982. Academic rank and salary commensurate with qualifications and experience. Application and curriculum vitae should be sent to Professor S. C. Gelskey, Director, School of Dental Hygiene, Faculty of Dentistry, University of Manitoba, 780 Bannatyne Avenue, Winnipeg, Manitoba R3E 0W3. □

Ministry of Health, Dental Hygienists

Competition H81:2422

\$20,784-\$23,808

There are currently eight excellent opportunities available throughout B.C. for career-minded enthusiastic hygienists. Competition will also establish an Eligibility List for future vacancies. Duties include assuming responsibility for pre-school, school and adult dental programs, delivering educational/motivational lessons, inspections/referrals and supervising staff; other related duties as required.

Qualifications — Graduation from recognized university with diploma in dental hygiene or equivalent. May be required to drive personal car on expenses or Government car.

Ministry of Health, Dental Hygienists

Competition K81:1858-23

\$19,248-\$22,044

At Tranquille, (near Kamloops), establish and maintain dental program; provide technical services; provide program of instruction to develop and implement dental care program including lectures, demonstrations, consultations to direct care staff, foster parents, group home operators, etc.; inspect dental hygiene of persons served by Tranquille with referrals to dentist; co-ordinate with Resident Life staff for visits of podiatrist and orthotist; other related duties.

Qualifications — Diploma in dental hygiene or equivalent; registration and license as Dental Hygienist in B.C.; preferably some experience subsequent to graduation.

Return applications
IMMEDIATELY.



**Province of British Columbia
Public Service Commission**

Positions
are open to both
men and women.
Please send resume
quoting competition number to:

544 Michigan Street, Victoria, B.C., V8V 1S3

book review

This is a well-illustrated book on Diet, Nutrition and Dentistry written by an Associate Professor in Biochemistry-Nutrition and a dentist in private practice.

The book is divided into two sections. The first section consists of six chapters which supplies information on the principles of nutrition including chapters on energy-producing nutrients and energy requirements and utilization.

The second section consists of 13 chapters dealing with the specific area of dietary and nutritional implications pertaining to the dental patient. Included are chapters on behaviour modification, diet and nutritional counselling for dental patients, and the application of this information to a dental practice setting. A complete case study followed by questions concludes each chapter to illustrate the application of nutritional counselling to dentistry.

The most applicable chapter for the dental profession is on "Diet and nutrition counselling in dental practice." It deals thoroughly with the rationale of diet and nutrition counselling and the art and science of counselling particularly for those patients with specific needs. (e.g., the caries-rampant patient, the periodontal patient, the pregnant and lactating patient, the post-surgery patient, and the cancer patient.) It also provides references to additional resource material on all the topics discussed.

One other well-illustrated and applicable chapter to dentistry is the chapter on "Controversies regarding food and nutrition." This chapter provides the practitioner with an evaluation on dietary selection patterns that influence nutritional status especially specific diets that may alter food selec-

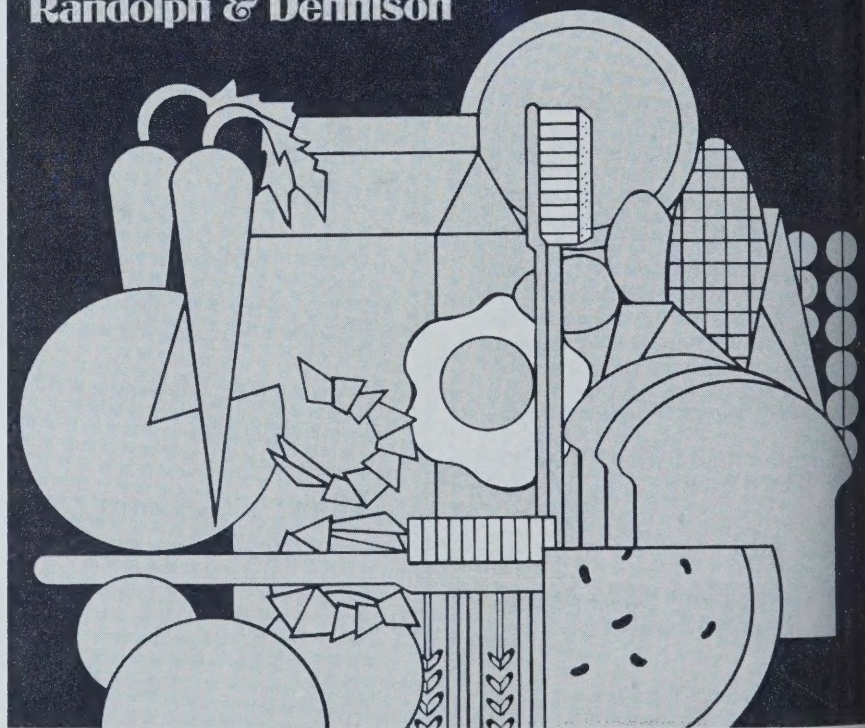
Diet, Nutrition and Dentistry, P.P. 358
(\$19.25 CAN.)

Authors: Patricia M. Randolph
Carol I. Denison

Publisher: The C.V. Mosby Company,
St. Louis, 1980.

DIET, NUTRITION, AND DENTISTRY

Randolph & Dennison



tion patterns and be injurious to the patient's health.

Overall, the book progresses logically from basic biochemical facts with scientifically sound and relevant information to a clinical dental practice setting. Thus, as a reference re-

source, this book makes a useful contribution to one's library. □

Linda Strevens, R.D.H., B.Sc.D.
Faculty of Dentistry
University of Toronto

Dental Hygienists

Get the facts now
about the challenge and
opportunity of a
Canadian Forces career.

If you have successfully completed a community college program and have certification as a Registered Dental Hygienist, you may join the Canadian Armed Forces.

The Canadian Forces offer steady employment, accelerated promotion, modern equipment, good income, fringe benefits, and a rewarding career.

Join the proud people serving all across Canada and overseas. For more information, visit your nearest recruiting centre, or mail the coupon below. You can also call us collect. We're in the Yellow Pages under "Recruiting".



THE CANADIAN ARMED FORCES.

Canada

The career with a difference.

Director of Recruiting & Selection
National Defence Headquarters
Ottawa, Ontario K1A 0K2

I am interested in dental hygiene career opportunities in the Canadian Forces.

Name _____ Tel. _____

Address _____

City _____ Prov. _____ Postal Code _____

There's no life like it.

Major new clinical evidence shows...

Crest has achieved a significant step forward in its anticaries protection

New Improved Formula Crest, which uses sodium fluoride in a hydrated silica abrasive system, provides significantly more anticaries protection than previous Crest. These results were demonstrated in the largest dentifrice clinical study ever published! A second major study² also demonstrated the improved anticaries effectiveness of the new formula. The new product has been pH-stabilized and formula-balanced to provide more fluoride to react with tooth enamel.

For further information please write to: Mr. H. R. Hamilton, Crest Professional Services Division, P.O. Box 355, Station "A," Toronto, Ontario M5W 1C5.

1. Zacherl, W. A., "Clinical Evaluation of Sodium Fluoride-Silica Abrasive Dentifrices," *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.
2. Beiswanger, B. B., Gish, C. W. and McLean, M. K., "Effects of Sodium Fluoride-Silica Abrasive Dentifrice Upon Caries," *Journal of Dental Research*, Vol. 60, Special Issue A, page 577, March, 1981.

DENTAL LIBRARY
UNIVERSITY OF TORONTO
124 EDWARD ST.
TORONTO 2
ONTARIO, CANADA

Improved protection from
Improved Formula Crest

JUN 23 1982
Formula Crest 39.4%

Previous
Crest 23.4%

NEW! IMPROVED
FORMULA
crest
for even better anticaries
protection within your
preventive programme

† "Crest contains sodium fluoride which is, in our opinion, an effective decay preventive agent, and is of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

CANADIAN DENTAL ASSOCIATION

For Library Use Only Until
SEP 18 1982
DENTISTRY LIBRARY

Library

the canadian dental hygienist

l'hygieniste dentaire du canada

SUMMER 1982 ÉTÉ

VOLUME 16, NO. 2

Convention '82



**WE NEED YOU;
YOU NEED US.**

Renew your
professional membership
today.

Your membership
is your voice in
your future!



cdha *achd*

the canadian dental hygienist

l'hygieniste dentaire du canada

contents/contentu

COVER STORY

Toronto was the setting for the recent CDA/ODHA Convention. Record numbers — 450 hygienists from across Canada — attended to learn about such timely topics as "Burnout in Dentistry," report of which appears in this issue on page 10.

In cover photo, looking from the new City Hall Square across to the old City Hall building, visitors and residents lounge in the sun around the large, shallow pond which is turned into a huge skating rink when winter arrives. In warmer weather the square is a place to gather for everything from lunching in the sun to music performances and speeches.

Cover photography by Bob Gallagher.

articles/articles

- A Dental Hygiene Student Reports on Delivering Dental Hygiene Services to an Inuit Community.
Valdene Hildebrand, Dip. Dent. Hyg. 16

- Overhanging Amalgam Restorations: Their Prevalence, Ramifications and Irradiation.
Shirley C. Gelskey, Dip. Dent. Hyg.,
B.S., M.P.H. 18

features/reportage

- Comment: Portability Taken to Task.
Stephanie Nagle, Editor 5

- Personal Finance. 14

- Alternatives: Consulting. Shirley J. Feller,
Dip. Dent. Hyg., B.A., M.B.A. 15

- Self-Assessment Test 24

- Book Review 30

departments/sections

- Newsline 6 Abstracts 28

- Directory 1982-83 26 Classified Advertising . 29

staff/l'atelier

Editor/Redacteur en chef
Stephanie Nagle
2221 Victoria Avenue,
Windsor, Ontario N8X 1R2

Publisher/Editeur
**Advertising Manager/
Gérant de la publicité**
J.S. Woloschuk
Controlled Publications

**Subscriptions Manager/
Gérant des abonnements**
Controlled Publications
680 E.C. Row,
P.O. Box 1029, Station "A",
Windsor, Ontario

Advisors/Conseillers
Joan Voris, 3589 Osler Street,
Vancouver, B.C. V6H 1M3

Marjorie Dimitri
1606 Ayleslynn Drive,
Vancouver, B.C. V7J 2T3

Louise Gosemick
8078 De Lorimier,
Montreal, Quebec H2E 2P9



Member Publication

American Association of Dental Editors
6176/CN ISSN 008-3380

THE CANADIAN DENTAL HYGIENIST is the official journal of the Canadian Dental Hygienists' Association and is published quarterly.

All journal communications should be directed to the Editor, except subscription and advertising matters which should be addressed to the respective staff members.

Subscription rates for non-members are: \$15.00 per year in Canada and \$22.50 per year foreign.

The opinions expressed in editorials or articles are those of the authors and do not necessarily represent the views of the Association, the Publisher or the Editor.

L'HYGIENISTE DENTAIRE DU CANADA est la revue officielle de l'Association des hygiénistes dentaires du Canada et est publiée à tous trois mois.

Toutes communications ayant trait à la revue devraient être adressées au Rédacteur en chef, à part les abonnements et tout ce qui concerne la publicité, ce qui, de leur côté, devraient être adressés aux membres du personnel respectifs.

Les tarifs d'abonnements pour les non-membres sont les suivants: \$15.00 par année au Canada et \$22.50 par année en pays étranger.

Les opinions exprimées dans les éditoriaux ou dans les articles celles des auteurs et ne représentent pas nécessairement les points de vue de l'Association, de l'Éditeur ou du Rédacteur.

Butler®

*world's most
complete line
of professional
toothbrushes*

G·U·M



**There's a Butler brush
for every patient's needs!**

Butler® offers more than 20 styles and sizes of toothbrushes. The G·U·M® line of brushes includes: Adult 3- and 4-row in nylon or natural, 3-row Youth and Child sizes in nylon, Sulcular, Travel Brush, and two new, compact Adult sizes have the no-nonsense straight handle... proven effective for easy manipulation!

Butler special-use brushes include: Proxabrush® system in 2 handles and 6 brush styles, Bass Right-Kind Subgingival, Orthodontic 3-row nylon, End-Tuft in 2 trim styles, Denture Brush, Bridge & Clasp Brush, and an Interdental Brush.

Butler has a complete line of Preventive Aids, too. All available for your patients at better drug counters everywhere. Write for catalog and professional price list.

"Your Single Source"

Butler 

JOHN O. BUTLER COMPANY

9715 Cote De Liesse Rd. Dorval, Quebec, H9P1A3

comment

Portability Taken to Task

Your husband comes home from his Toronto office and announces that he has a chance for a promotion, but it involves a move to Montreal. After congratulating him on his success, you begin to wonder what the hygiene licensing procedures are in Quebec for a ten-year University of Toronto graduate.

You've just graduated from an Ontario community college dental hygiene program. The reports of high salaries and numerous employment opportunities lure you West, but you wonder if your license is recognized in the Western provinces, since you graduated from a non-accredited school.

You've always wanted to see Eastern Canada and here's your chance. A hygienist in New Brunswick wants to arrange a two-month exchange with a hygienist in British Columbia, but is this possible to do without having to write a practical and clinical examination?

The portability of hygienists within Canada is a confusing business. If you have it down pat one year, you can bet that a regulation somewhere has changed by the next year. At this time, the key issue determining how "portable" you are seems to hinge on whether you graduated from an accredited dental hygiene program. If you did, you can work without further examination, no matter how long ago you graduated, in Newfoundland, Nova Scotia, New Brunswick, P.E.I., Quebec (providing that you learn how to converse in French within a three-year period), and Saskatchewan. Manitoba, Alberta, and B.C. may insist that you pass a written and practical board exam depending on your date of graduation (five years ago seems to be the cut off point, although your employment record may exempt you); and Ontario requires that everyone, including graduates from their own province, sit their board examination. (If this makes you think twice about moving to Ontario, that may be to your advantage because the salaries are generally lower and the job opportunities scarcer in comparison to the rest of Canada.)

If, on the other hand, you have graduated from a non-accredited program, of which there are nine in Canada, you are not quite as "portable". If you wish to practise in Newfoundland, Nova Scotia, or New

Brunswick, you have a problem because only graduates of accredited schools of dental hygiene are eligible for licensure there. You may have a problem getting a license to work in P.E.I. depending on whether the licensing body views your course as a one-year or two-year program. If you wish to work in Quebec, Ontario, Manitoba, Alberta, or British Columbia, you will be allowed to sit for a comprehensive written and practical examination, and Saskatchewan will accept you without further examination as long as your program is approved by the College of Dental Surgeons of Saskatchewan.

You are probably asking yourself why all dental hygiene programs aren't accredited, and you may even be wondering if there is any method of providing a dental hygienist with a "national" license which would make her/him employable across Canada.

Firstly, why aren't all programs accredited?

Dental hygiene programs in the province of Ontario are under the auspices of the Ministry of Colleges and Universities. Three programs are accredited; eight are not. In January 1980, the Ministry issued a policy stating that no outside body has the right to review college courses, especially when the college has to pay for it. This was a mass motion covering all college programs, not just dental hygiene specifically. Since then, an investigation of each program has been conducted by the Ministry to determine the necessity of accreditation by an outside body for a program's graduates and representatives from Ontario dental hygiene programs feel confident that they will be allowed to invite CDA accreditation survey teams to their schools within the year.

Two programs in Quebec are not accredited at this time, and they will be surveyed this fall.

The second question concerning the possibility for national portability of hygienists brings to mind the necessity for assuring that the practical and theoretical skills of dental hygiene graduates from across Canada are at an acceptable level to protect the public. One way to ensure this standardization of education is to develop a National Dental Hygiene Examining Board (N.D.H.E.B.). The CDHA Task Force on Portability, under the direction of Chairperson, Elaine Good, has been studying this concept and has

received some feedback about this type of examination from a few provincial licensing bodies.

Two Eastern provinces feel that a national portability examination would be acceptable as long as it was underwritten by the CDA accredited schools. A third Eastern province was concerned with the operating costs of a N.D.H.E.B.

Ontario pointed out that accreditation doesn't measure clinical skills of the individual hygiene graduate and they would want assurance in this area. They suggested (1) a national exam, both clinical and written, conducted by examiners from each province or (2) a national written exam, leaving further examination of clinical skills up to each province so that they could tailor it to the specific hygiene duties allowable in their province.

The British Columbia licensing body stated that they were not ready for change. Their concern is not to make portability for dental hygienists easy, but to protect the public in their province and ensure that all practitioners meet a certain standard.

The licensing bodies of the remaining provinces have not offered any feedback as yet.

The investigation has just begun, and we are assured by our Portability Task Force that it will continue. The Task Force has collected a multitude of opinions on this topic from local dental hygiene societies across Canada reporting that "Canadian hygienists are concerned about their limitations for portability . . . and they want to see changes made. Most hygienists would like to be able to practise anywhere in Canada without having to write an exam." While this desire will no doubt be viewed as impractical by provincial licensing bodies, the Task Force has stated their intention to communicate with the Registrars of the provincial licensing bodies to determine whether they can work together to make some improvements in the area of portability for dental hygienists. Perhaps we may even reach a point some day when the saying "have national licensing certificate, will travel" will be a reality for Canadian dental hygienists. □

Stephanie Tagle

Ontario membership figures creep upwards

Kathleen Feres-Patry, Ontario Membership Chairman, is delighted to report that Ontario has increased their number of members as compared to last year, and there is still a few months to go before a final figure is tallied.

At the end of 1981, Ontario had 890 active members and 190 life, honorary, and students members. As of May 10, 1982, the figures were 930 and 188 respectively.

Ms. Feres-Patry feels that the distribution of a membership kit designed by her committee contributed significantly to maintaining and recruiting Ontario members.

"I feel that the transfer of information through the component societies is a real key to the involvement of the 'grass roots' hygienists."

The membership kit was sent to the 16 component societies in Ontario and consisted of four "mini-campaigns" which were a series of short lesson plans which could be presented at four consecutive local meetings. The four lesson plans dealt with: the structure and roles of ODHA/CDHA; the goals and objectives of ODHA/CDHA; investing in your Association — where does your money go; and professionalism. The membership kit also contained suggestions for attracting new members. Eight component societies used the kit.

The areas showing the lowest percentage of members vs. non-members were Windsor (40%), Kingston (43%), and Central Toronto (46%). Ms. Feres-Patry points out that these areas did not use the mini-campaigns to promote membership. Next year the telephone tree committee, chaired by Jane Uchikata of Ottawa, will key in on these areas of low membership with phone calls to non-members explaining the benefits of membership.

Ms. Feres-Patry hopes to improve communications with the local societies this year and be able to report an increase to 1,050 active members by the end of '83. To achieve this goal, Ms. Feres-Patry facilitated an Ontario Membership Workshop which took place during the ODHA/CDHA Convention. The workshop was attended by representatives from seven areas, CDHA membership chairman, Jo Gardner, and CDHA membership campaign co-ordinator, Debbie Lang. The workshop participants planned an all-

Ontario push for members to bring non-members to a local society meeting in October. One of the topics from the mini-campaign will be presented at that meeting and special incentive draws will be organized for members who recruit non-members.

Ms. Feres-Patry estimates that, if

each component society could recruit just five or six new members (not student members becoming active members, but hygienists who never have been members or who have let the membership lapse), Ontario could reach its projected membership goal for '83.



Jo Gardner (left) and Debbie Lang put their heads together to discuss the '83 membership campaign.

CDHA/ODHA Toronto Convention draws record number of hygienists

450 hygienists from across Canada attended the combined CDHA/ODHA Convention in Toronto, May 9-12, at the Holiday Inn Downtown. This was the third convention that Maureen Donoghue had chaired for the ODHA, and the largest CDHA convention to date.

Ms. Donoghue and her convention committee organized a scientific program which featured presentations on "Holistic Medicine" by Dr. M. Borins, "Relationship of food additives and allergies to physical and emotional health" by Dr. L. Gilka, and "Burnout in Dentistry" by Ms. Arlene Levin. Dr. George Benjamin presented his film documentary on his discovery of "The Black Holes" which he discovered in his diving expeditions.

Unique to this scientific session was the involvement of hygienists as guest

speakers. Four Canadian hygienists presented short lectures on a variety of topics. These included "Dentistry for the Handicapped" by Mrs. Dale Scallan who described her work with mentally and/or physically handicapped children at the Children's Hospital in Eastern Ontario, "A Little Bit Extra" by Mrs. Jenny Thomas, who demonstrated how to incorporate a periodontal philosophy and mode of practice into a general practice situation, "Dental Hygiene Practice Settings — Is an Alternative in Your Future?" by Lt. Johnson, who illustrated the alternative roles that Canadian hygienists are adopting and reported on findings of the 1979 Lewis Report and her own investigations, and "The Dental Therapist — Hygienist in an Academic Environment" by Ms. Barbara Loh, who described her employment situation.



Maureen Donaghue (convention chairperson).



Linda Berry accepts presidential gavel from Patricia Grant at the close of the '82 board meeting.



Convention registration: Mini-calculators were included in registrants' packages signifying Toronto's financial prowess.



St. Clair College dental hygiene students, Tatiana Hoffman and Linda Kapustiak, present their table clinic on oral cancer.

tion with the University of Saskatchewan dental school and the Regional Psychiatric Centre (Federal Prison).

Ms. Donoghue felt that the highlight of the social events was the "Wind-up Breakfast", sponsored by Colgate Palmolive, held at the top of the CN Tower in its revolving restaurant. Other social events included a gala fashion show sponsored by Pimms No. 1 Cup and a trolley car lunch tour.

Ms. Donoghue's convention committee consisted of Pat Webb, scientific program; Judi Rogers, hospitality; Peggy Knill, registration; Linda Berry, CDHA Liaison; Naomi Terakawa, table clinics; and Bunny Blazer, fashion show organizer.



Janice Brennan and Enid Erikson don rainwear to promote the '83 national convention to be held in Vancouver, B.C.

Evelyn McNee, 1983 Convention Chairperson, and members of her committee were on hand to promote the next convention in Vancouver, B.C. Sept. 25-28, 1983 and distributed fortune cookies from Vancouver's Chinatown which promised fun, fortunes, wisdom, and dark handsome strangers at the '83 session.

We'll be banging the drum for '83 membership this fall



This year's membership campaign is being co-ordinated by Mrs. Debbie Lang of Mississauga, Ontario. Mrs. Lang has planned this campaign with a view to "directing our energies toward strengthening and preserving the loyalty of the truly professional hygienists, who comprise our membership

now, by providing valid, efficient, essential services for them. This will help build a stronger Association that will be more appealing to non-members."

Lang will be assisted by Mrs. Jo Gardner, CDHA membership chairman, and the ten provincial membership chairmen in distributing promotion material to hygienists across Canada this fall. The '83 campaign theme is the "Challenge of the 80's".

New self-study course offered by ADHA

THE DENTAL HEALTH CONSULTANT IN COMMUNITY BASED PROGRAMS is the latest in a series of new self-study courses offered by the American Dental Hygienists' Association. The series is being produced in part with the support of Block Drug Company. This most recent course will be available in June 1982.

Community consultation challenges dental professionals at a time when alternate health care delivery settings are providing career options. THE DENTAL HEALTH CONSULTANT IN COMMUNITY BASED PROGRAMS will provide students and practitioners with background information to ease entry into consulting activities. Key features of the course are:

- an overview of health care delivery settings
- a dental health consultant's involvement in community program planning
- roles of the dental health consultant
- the consultation process.

Through this series of self-study courses, ADHA offers dental personnel the opportunity to learn at their own pace using a self-assessment format. Continuing Education Units (CEU's) are available for the course.

Block Drug Company, makers of oral hygiene and denture care products has generously supported this initiative for the further education and advancement of dental health professionals and consumers.

THE DENTAL HEALTH CONSULTANT IN COMMUNITY BASED PROGRAMS will be available after June 1, 1982 at the following prices:

- \$15.00 for students (ordered by institutions, 10 or more)
- \$39.00 for ADHA members
- \$49.00 for others

Please make checks payable to American Dental Hygienists' Association (add \$3.00 to each order for postage and handling) and mail to:

THE DENTAL HEALTH
CONSULTANT IN COMMUNITY
BASED PROGRAMS
ADHA, Accounting Department
444 North Michigan Avenue,
Suite 3400
Chicago, Illinois 60611

Linda Berry brings the CDHA executive to Ontario

Linda Berry was installed as the 19th CDHA president after the '82 board meeting held in Toronto in mid-May.

A '65 hygiene graduate from the University of Toronto, Linda is well-known by Ontario hygienists as a past-president of ODHA and as a seven year veteran of the CDHA board of directors. During the next 17 months, until the '83 board meeting to be held in Vancouver, B.C., Linda will spend numerous hours on her behalf in her role as CDHA president.

"I have no degrees or special educational background that I can point to which prepared me for this role. I've done a little teaching at George Brown College, but I mainly consider myself "grass-roots" hygienist with a genuine interest in our professional Association and, this year, I would like to encourage leadership among other "grass-roots" hygienists."

Linda's husband, Ron, is CDHA's insurance consultant and has an active interest in the Association. Because of this, Linda feels that her family (she has two children) will understand her time commitments she must give to the Association during the next months.

Linda senses that there is a lot of confusion about what CDHA is and does among hygienists.

"During my term, I would like to promote the people of CDHA. The members see all these names over and over again, but they don't know who they are or what they have done for them. There are a few hygienists who have served CDHA for a considerable length of time, creating a fair bit of continuity, and they are nearing the end of their terms. I'd like the members to recognize their contributions while they're still involved."

Linda hopes to meet with local societies and get some feedback on what they like and don't like about what CDHA is doing. Linda frequently travels across Canada, competing in swimming meets as a backstroke contender, and she hopes to be able to coordinate this travel with CDHA business.

Another goal that Linda would personally like to see CDHA realize during her term is the establishment of a central office in Ottawa which would be accessible to members, to other organizations, and to the public.

Linda has chosen Judi Rogers as her treasurer, who will also continue to serve ODHA as their treasurer, and Peggy Knill as secretary, who will also continue in her job as ODHA Executive Secretary. Mary Pelletier of New Brunswick is our president-elect and he will be travelling to Toronto for one executive meeting during the '82-'83 term.

Linda describes past-president Pat Grant as fantastic, particularly in keeping her informed about general business and upcoming issues, and Linda hopes that she can keep her president-elect and her second vice-president as involved as she was under Pat's presidency.

Her executive's first task will be to advertise for and hire a new Executive Secretary. (Unfortunately, Thora Apelt, our recently employed Executive Secretary, has had to resign due to health reasons.)

"There are also a number of committees working this year to define terms related to employment (i.e. independent practice, direct supervision, general supervision, indirect supervision, and independent contracting), to study incorporation for our Association, to continue to investigate portability, and to do some long range planning."

"We are very pleased that next year the executive will be in New Brunswick and the following year it will be in Alberta. Neither of these provinces have ever had a CDHA executive and this helps to make the goals of CDHA known nationwide."

Linda's executive will be the ninth CDHA executive to be centered in Ontario. Former presidents from Ontario include Jill Dossett '64-'65, Bonnie Snowdon '66-'67, Pat Johnson '68-'70, Sharon French '70-'71, Sherita

Clark '73-'74 and '74-'75, and Jane Costigane '76-'77 and '77-'78.

Liability insurance for C.D.H.A.

We are pleased to announce, effective March 1, 1982, CDHA has implemented Professional Malpractice Insurance.

Since the policy is issued in the name of the Canadian Dental Hygienists' Association, on behalf of its members, individual policies will not be issued.

The following is a condensed and paraphrased version of the most important features of the policy.

Who is insured?

- All active members of CDHA
- Non-members will be covered for any claims made while they were a CDHA member
- Legal heirs or beneficiaries of members

What is the coverage?

- CDHA members are covered for all sums they are legally obligated to pay to a third party as damages for any claim presented during the policy period and resulting from professional services
- Professional Services shall mean: any services, including opinions and/or counsellings which were rendered or should have been rendered by the Insured in the practice of his/her profession or occupation and, insofar as the Insured may be held responsible, by his/her predecessors in business or any other person, including professional services voluntarily rendered by an Insured, to a person who is ill, injured, or unconscious as a result of an accident or emergency, or to a person whose illness or injury does not constitute an emergency. Professional Services shall also include teaching and instruction on the subject of the Dental Hygienist Profession

What will the Insurers pay?

- any damages for a claim made while the policy is in effect resulting from professional services
- defence for the insured in a civil action
- premiums on an appeal bond
- expenses incurred in investigation, defence, and negotiation or final settlement
- cost taxed against the Insured in a civil action
- all other reasonable expenses, other than loss of salary, incurred by the Insured.

What is not covered?

- any claims made before the policy came into effect
- claims resulting from fraudulent or criminal acts
- fines awarded by a court of law of any country
- members also covered by nuclear energy liability insurance
- claims resulting from a nuclear energy hazard

What is the maximum coverage?

The maximum coverage will be \$1 million for any one claim and \$3 million per member per year.

General Conditions

It is the responsibility of the Insured to inform Gestas Inc. of any facts or circumstances which may give rise to a claim.

The Insured shall co-operate with the Insurers, whenever required, except in a pecuniary way, for the purpose of obtaining information or for settlement or defence.

What to do in event of a claim

At present, Gestas has asked that any claim be promptly reported to them at 15 Toronto Street, Toronto, Ontario. We might ask as well that you contact the CDHA insurance consultant as follows:

Mr. Ron Berry, 5400 Yonge Street, Willowdale, Ontario.
Phone 226-6950

If any circumstances occur that make you believe a claim might or could be presented, you should notify Gestas immediately. It may seem insignificant at the time, but in most cases early acknowledgement of a claim makes for an easier solution to the problem presented.

If you have any questions on the coverage provided, please contact Mr. Berry.

Entries invited for 1982 Community Preventive Dentistry Award

The American Dental Association announces that entries now are being accepted for the annual ADA "Community Preventive Dentistry Award."

The program, funded by the Johnson & Johnson Company, recognizes and rewards those who have developed and/or implemented significant preventive dentistry projects. A \$2000 award will be presented to the winner; \$300 awards may be granted for other meritorious efforts.

Eligibility is not limited to dental personnel. Any individual or organization responsible for creating and implementing a community program con-

cerned with some aspect of preventive dentistry may enter. Appropriate community activities include school programs, programs for such special population groups as the elderly or handicapped, media public information programs, and private practitioners' community education programs. Preventive dentistry includes oral hygiene instruction, plaque control, uses of fluorides and sealants, relevant patient motivation, and nutrition education.

Award winning entries in 1981 were:

- An education program developed in response to the public's need for information on the prevention of nursing bottle caries.
- A dental health center providing access for prevention and treatment of dental diseases to low income children and adults.
- The longest running continuously monitored school fluoride rinse program in existence.

Additional information brochures and entry applications are available on request from the Council on Dental Health and Health Planning, American Dental Association, 211 East Chicago Avenue, Chicago, Illinois, 60611. Xerox copies of the entry application will be accepted. Entries must be acknowledged by a state or local dental society, dental school, or dental director, as indicated on the application. Entries must be postmarked by August 15, 1982.

Hygienists prone to burnout — speaker says

Arlene Levin, a clinical social worker from California and herself a victim of burnout in dentistry, described the symptoms and treatment of career burnout to about 200 hygienists attending the 19th annual CDHA/ODHA convention.

A 1960 graduate in dental hygiene from Temple University, Philadelphia, Ms. Levin practised hygiene for nine years before pursuing a Master's Degree in Social Work from the University of Southern California. She conducts seminars on burnout for dental professionals, nurses, and educators, and feels that hygienists are particularly prone to the condition.

According to Ms. Levin, "burnout is the physical, emotional, and attitudinal exhaustion that can occur after some time in a demanding professional (or personal) role. Burnout is not merely stress. It is always caused by intense involvement with people, over long

periods of time, in situations that are emotionally demanding. It represents the loss of idealism, caring, and concern among people who at some point were extremely idealistic and highly committed."

"Hygiene has a lot of things built into it that make it a burnout prone profession. The bad news is that lots of dental professionals are experiencing this. The good news is that it is completely treatable and preventable."

To determine if you may be at risk of burning out, Ms. Levin suggests that you use the list at the bottom of page 11 to check any symptoms that you have experienced on the job in the last 12 months.

Count your checks. If you have more than five, you are on your way to becoming burned out.

Ms. Levin describes the burned out hygienist as a person who is tired of smiling and being happy eight hours a day, a person who finds it difficult to have compassion for patients, and who finds it difficult to delegate tasks, having to do everything herself/himself. S/he is withdrawn socially and feels underappreciated by her coworkers and employers. S/he feels like a robot or a broken record repeating the same information. S/he feels underutilized and overworked.

Ms. Levin suggests that certain workplaces are more conducive to burnout than others and she advises the use of the following checklist to determine whether you work in a burnout prone environment.

Is your workplace a BOPE? (Burnout Prone Environment)



"Hygiene has a lot of things built into it that make it a burnout prone profession," says Arlene Levin, clinical social worker and former hygienist.

- Workplace stress level frequently/continuously high

- Repetitive work design/little or no task rotation
- Few "time outs" for stress reduction during workday/workweek
- Little encouragement to take maxi and mini vacations regularly
- Perfection/excellence demanded on a continual basis, no let-up
- Few "strokes" — verbal messages of appreciation/recognition
- Norm is to give to others with no/few expectations of reciprocity
- People don't get rewarded for extra effort
- People overloaded with unrealistic demands/inadequate resources to do the job effectively
- People left out of decision-making
- People not listened to/suggestion not valued for improving efficiency morale
- Hierarchical vs. participative structure
- Rigid, unrealistic time schedules
- Poor communication
- No/poorly written job description in office procedures and policy manual
- No/ineffective office meetings
- No/ineffective performance evaluations
- Don't have/don't adhere to a written philosophy of practice
- No/poor goal setting and prioritization
- Inadequate/poorly functioning equipment
- Laughter/lightheartedness frowned upon
- Part of job is constant repetition of same "messages"

Again the magic number is five. If you have checked more than five, your workplace is such that it actually adds to your potential for burnout.

To successfully treat and prevent dental burnout, Ms. Levin advises the following:

Workplace stressbreakers

1. After workplace stresses have been identified and recorded by team members, take an active problem-solving approach towards eliminating or reducing these stresses (which may be people, organizational, financial, situational or environmental).
2. Break the tedium often associated with close, precise dental procedures by taking daily "time outs," i.e., resting, progressive relaxation exercises, isometrics, running in place, meditation, guided imagery.

- ery, reading, relaxing in comfortable dental chair, lying down, napping, listening to music, humor, etc.
3. Create a comfortable staff lounge, equipped with a small refrigerator, micro-wave oven, blender, healthy snack foods, and a bulletin board.
 4. Establish specific times during the week for repairs and maintenance chores.
 5. Get out of the office regularly for lunch.
 6. Get some physical exercise during the day, before, during, or after work, i.e., take a walk, jogging, racquetball, jumping rope, stretching exercises, etc.

humanizing the workplace

1. Don't come to work sick and take the chance of poor productivity and/or infecting others. Allow for a certain number of paid sick and/or well days per year. Allow for personal time off, including mental health time, with or without compensation, depending on office policy.
2. Establish goals and priorities for each team member within the practice and for the entire dental practice. These goals may involve finances, education, time off, continuing education and skills development, public relations, marketing, leadership development, recreation, improved health, interpersonal relationships, and communications.
3. Praise individuals and the organization when goals are met and continually set new goals.
4. Establish regular times for the entire team to discuss feelings associated with work, current office policies, limitations and satisfactions, and concerns for the future.
5. Create a written philosophy of practice as a dental team.
6. Review that philosophy on a regular basis to see if all team members are in agreement with (and adhering to) the philosophy. The philosophy should be changed with changing team values, goals, etc.
7. Create an informal but respectful environment within the workplace. Be sure to refer to team members by their names or job titles. Women staff members over 18 should not be referred to as "girls" (as in "See my girl at the front desk" or "the other girl"). Dentists, managers, and auxiliaries should get into the habit of deleting "girl(s)" from their workplace vocabularies!

8. Encourage lightheartedness and fun within the workplace without sacrificing professionalism.
9. Occasionally socialize as a group.

All-team involvement

1. To reduce the boredom often associated with repetitive dental practice, cross-train and rotate duties of staff on an occasional or regular basis. Also trade off the most and least desirable maintenance tasks regularly.
2. Hold regular office meetings attended by all team members and part-time staff. Distribute in advance a memo requesting items to be discussed at staff meetings. Also distribute the finished agenda in advance of the staff meeting.
3. To communicate routine matters, use routing-style memos, which are read and initialed by each recipient.
4. Alternate responsibility for coordinating and chairing office meetings. This may be done by an individual or a work team.
5. Use office meetings for different purposes; i.e., educational, motivational, team-building, problem-solving, conflict resolution, goal setting, prioritizing, and future planning.
6. Schedule regular performance evaluations for each member of the team, including the dentist(s).
7. Institute "participatory democracy" by insuring that team mem-

bers can have input into decisions which involve them.

8. Elicit input from each team member about how she/he sees the practice, its strengths and weaknesses, and suggestions for improving efficiency and morale.
9. Once the best people have been hired and oriented to the practice, allow them to work autonomously.
10. Equip staff with adequate time, space, and personnel to be able to work effectively and autonomously.
11. Be realistic about workplace expectations.

Other ways of avoiding burnout fell under the headings of establishing and using good support networks, self-care, making better use of resources, and the economic package.

Ms. Levin is currently writing a book titled "The Dental Stress Workbook" designed to be used as a burnout prevention handbook for dental teams. She hopes to have it ready for publication in '83. If your office is interested in learning more about combating burnout, Ms. Levin operates a consulting service which can help to identify the stressful areas in the practice, strengthen communications between the dentist and the staff, create an effective office meeting design, design a performance appraisal system, develop an office philosophy, and among other services, tailor a program for preventing burnout. Her address is P.O. Box 84315, W. Los Angeles, CA 90073, (213) 473-7451. □

PRIMARY BURNOUT SYMPTOMS

Physical

fatigue
anxiety
insomnia
gastro-intestinal problems
head, neck, back, or shoulder aches
lowered resistance to infection/inability to "shake a cold", etc.
hypertension
heightened sinus and allergy problems

Emotional

depression
frustration
boredom
understimulation
fragmented
resentment
feeling "invaded"
overloaded
apathetic
angry
defensive
powerless
hopeless

Behavioral

abuse of: alcohol
drugs
caffeine
nicotine
food
sleep
work
withdrawal/isolation from professional or personal peers
reduced ability to focus/concentrate
irritable
inability to relax
taking anger and frustration out on others
little task completion
loss of enthusiasm/humor

**The American Dental Hygienists' Association
and
the Pennsylvania Dental Hygienists' Association
invite you to attend
the**



**to be held
July 10-13, 1983
in
Philadelphia, Pennsylvania, USA**

Dental Hygiene: Today—Tomorrow

9th INTERNATIONAL SYMPOSIUM ON DENTAL HYGIENE CALL FOR ABSTRACTS

Papers on Dental Hygiene Today, Tomorrow are requested for presentation during the 9th International Symposium on Dental Hygiene, July 10-13, 1983 in Philadelphia, Pennsylvania. Following are guidelines for contributors for submission of abstracts.

Health professionals from all disciplines are invited to participate and abstracts are encouraged from all countries.

Abstracts will be critically evaluated according to the following guidelines:

1. Is the study subject clearly stated and justification/rationale for its study given? OR Is the program's objective clearly stated?
2. Are the study's objectives/purposes or hypotheses to be tested identified? OR Are the program's approach and/or key features clearly described?
3. Is the methodology of research outlined? Is it appropriate for the purpose of the study? OR Is the program relatively innovative?
4. Are results reported? OR Is the program applicable to general use in dental hygiene?
5. Are the conclusions supported by the findings? OR Does the program appear to meet its objectives? OR Are there appropriate plans to evaluate the program's impact?

Each abstract submitted will be critically evaluated by two reviewers on the degree to which the abstract meets the stated criteria.

REQUIRED INFORMATION/ MATERIAL

1. A separate cover sheet (8 $\frac{1}{4}$ " $\times$ 11 $\frac{3}{4}$ " or 21cm $\times$ 30 cm) which must include the following information:
 - a. Title of paper. Title should be brief and clearly indicate the nature of the paper. Title must be typed in capital letters. Abbreviations should not be used in the title.

- b. Name(s) of author(s) and the identity of the individual who will present the paper.
- c. Professional status of author(s) and address and telephone number of senior author.
- d. Audiovisual needs (e.g. slide or overhead projector, screen, chalkboard, etc.) clearly identified.

2. Title of the paper followed by a typed, double-spaced narrative abstract limited to one hundred words. References and credits are not included as part of the abstract. Special tables or graphs, using black ink or type-written, may be included. All papers must be submitted in English.

3. Two copies of the abstract, as well as two self-addressed, stamped envelopes, must be postmarked no later than **November 1, 1982** and mailed first-class to:

Barbara J. Schnurr—Director of Dental Hygiene
University of Louisville
Health Sciences Center
Louisville, Kentucky 40292

Presentations will be limited to twenty (20) minutes (approximately 2,000 words). Each speaker will be assigned to scheduled time on the program. Notification to authors of papers selected or rejected will be made by January 1, 1983. Copies of complete presentations will be requested for submission by **March 1, 1983**.

It is a condition of acceptance of abstract that the abstract, complete papers and illustrations may be published by the Symposium Committee and reproduced in written or recorded form.

personal finance

Selecting Investment Objectives

Saving and investing do not have the same meaning. If you do not spend, then you are **saving** money.

Investing means putting your money to work in order to earn a return. What is an acceptable return? That depends on your personal investment objectives.

Assume that your financial goals have been determined. You have decided on the types of things that you would like to do with your money in the long and the short run. How can you obtain this money? Consider your job, you can change it or work longer hours. Alternatively or additionally, you can invest your money and make it grow.

How much risk are you willing to take? Should the investment be liquid (i.e. easily cashable). Do you prefer to earn a fixed annual amount?

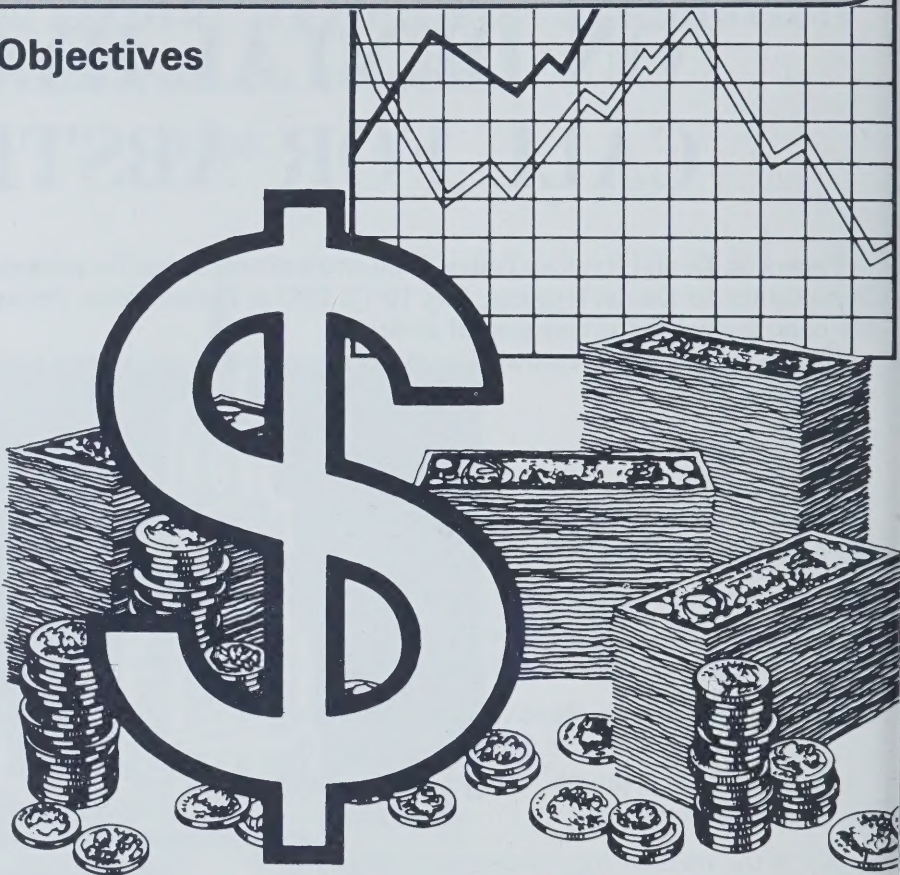
Various investment objectives include long term capital gain, short term capital gain, income, safety, liquidity, taxation, and venture situations. For example, if you prefer to purchase an investment at one point in time for a price of \$100.00 and sell it three to five years later at perhaps \$400.00; this is called a **long term capital gain**. If you can sell the investment in a year or less for a price greater than the one paid; this refers to a **short term capital gain**. Selling an investment for less than the price that you paid for it is a **capital loss**.

Income refers to investments that pay dividends or interest.

Venture situations refer to investments made in risky items that might mean either huge capital gains or losses.

It is not possible to find any one investment that provides for all of these investment objectives. A savings account provides **safety** and **liquidity** but the **income** and **tax** considerations are probably less desirable than a dividend paying stock. A common stock in a small growing company might offer potential **short term capital gain**, but it might not pay any dividends (**income**). Although the savings account would provide **safety**, investment in the small growing company might be a bit **risky**.

Each investment vehicle offers different combinations of the investment objectives. It is essential that you discuss with your broker the investment objectives that best suit your financial goals and temperament. In fact, given your specific financial goals, your in-



vestment objectives should also be based on the following: your age, salary, employment position, dependents, investing experience and attitude, net worth, taxation, and estate considerations. Your broker (registered representative) can assist you in

identifying your investment objectives. She/he will also recommend investment alternatives to meet the objectives. An explanation of various investment vehicles such as common stock, bonds, preferred shares, etc. will appear in future articles. □

Summary of Types of Investment Objectives

<u>Type</u>	<u>One Example</u>
income	dividends from stock or interest from bonds or bank accounts
capital gain	the difference when you buy a stock at one price and sell it at a higher price
safety	maximum safety can be obtained from Canada Savings Bonds or Government of Canada Bonds
liquidity	an investment that can readily be converted into cash (without penalty)
venture situations	the "high flyer situation". You might make a huge capital gain (or loss!)

References: Brown, K. H. Personal Finance, Ontario: Prentice-Hall, 1981

Canadian Securities Institute, The Canadian Securities Course, Ontario: C.S.I., 1981

alternatives



Consulting

**Sheryl J. Feller, Dip. Dent.
Hyg., B.A., M.B.A.**

After several enjoyable years as a faculty member of the University of Manitoba's School of Dental Hygiene, including a two-year stint as the program's acting director, I decided to return to graduate school and pursue a Master of Business Administration degree. Why an M.B.A.? The decision was reached after extensive information gathering and analysis, not to mention soul-searching. The University's counselling service was extremely helpful and I would highly recommend that any hygienist searching for "alternatives" contact a career counsellor for assistance. The other alternatives which I considered were Law or a Master of Social Work. The M.B.A. became my final choice for a number of reasons: the degree is highly respected and sought after by the business community; the degree is versatile and would serve me well in either education, health care administration, or business; and, I would be able to pursue the degree on either a part-time or full-time basis.

Most important to me was obtaining qualifications which would allow a high degree of career flexibility and make it possible for me to become my own boss. If you are considering returning to school, your first task should be clarification of your personal career goals and priorities. Any career decision should be made using personalized decision criteria.

I entered the M.B.A. program at the University of Manitoba as a part-time student in September, 1978. I had originally planned on returning to school as a full-time student, but found that 1978 was also to be the year for "Project Baby." Thus, I took two courses during the fall term, gave birth to Jamie in December (resulting in a deferred "Business and its Environment" exam!) and continued in January with two more courses. Between 1978 and 1980, I continued this pattern of part-

time studies combined with on-the-job parenthood training and part-time private practice.

In 1980, I was invited to apply for a University Graduate Fellowship. The Fellowship was awarded and I became a full-time student. During 1980/81, I also served on the executive of the M.B.A. Students' Association and found it interesting to attend meetings as a student representative, after so many years of being on the other side of the table.

Following graduation in May, 1981, many exciting opportunities emerged. Some of the opportunities available to hygienists with additional education in business administration are: administrative positions in hospitals; research, policy analysis or program co-ordination in health care, university or government organizations; teaching; and consulting. Many of my M.B.A. classmates, most with no previous experience in health care, have accepted positions in the health care field.

Still seeking a job with flexibility, I chose to seek opportunities in consulting and teaching. During 1981, I served the University's Faculty of Administrative Studies as a sessional lecturer, but now I am focusing on the development of two companies in which I am a partner. The first company is "SJB Management Consultants", a partnership with my husband (also an M.B.A. graduate).

My first client was, and continues to be, the University of Manitoba Faculty of Dentistry. On a part-time basis, I provide the Dean of the Faculty with a variety of consulting services such as the organization and execution of functional reviews of support departments. The first functional review which I conducted was an assessment of the Dental Stores Unit in the Faculty. Through reviewing documents and conducting interviews, I assessed the unit's management, cost effectiveness, and operations, and formulated a number of recommendations regarding reporting mechanisms, inventory control, record keeping, purchasing procedures, and service. The Faculty is now imple-

menting a number of these recommendations. Other activities include the development and co-ordination of outreach programs such as a dental screening program for Winnipeg's well-elderly and preparation of research proposals.

In addition, "SJB" provides consulting services to other organizations and businesses. Services are customized for each client; thus, the range of services is wide. One project involved design and execution of a market survey which was used in making revenue projections crucial to deciding whether or not to establish a new veterinary clinic. Other projects involve development and presentation of workshops and seminars on topics such as supervision.

I hope to be able to provide the dental hygiene community with a new type of service through "SJB." In addition to being able to provide customized consulting services with respect to problems or opportunities in dental hygiene practice, education, or administration, I plan on developing a number of educational packages on topics such as dental team effectiveness, conflict management, and personal financial management. These packages will be a new resource for dental auxiliary associations and institutions.

My other business interest is "Western Opinion Research", a new Winnipeg based market research firm which provides market research services to business, government, political, and non-profit groups. "Western Opinion Research" relies primarily on personnel who (although educated in a variety of fields such as Arts, Home Economics, and Commerce), have in common a desire to combine part-time work with family and home responsibilities. These talented women find that serving as research interviewers on a project basis allows them to be involved in interesting work that can be co-ordinated with their other responsibilities and, often, as in the case of telephone surveys, can be done at home. It is very exciting to be involved in developing an approach to work which I feel is unique and sensitive to women's needs.

As the nature of health care changes, the need for consultants and administrators in the field becomes increasingly important. For those hygienists who wish to return to school and pursue an exciting "alternative", I highly recommend the pursuit of an M.B.A. and consulting. □

A Dental Hygiene Student Reports on Delivering Dental Hygiene Services to an Inuit Community

Valdene Hildebrand, Dip. Dent. Hyg.

Rankin Inlet is a remote Inuit community located 930 miles north of Winnipeg. Since January of 1980, dental teams from the University of Manitoba Faculty of Dentistry have been periodically sent to this area for one or two week visits. This program is sponsored by the N.W.T. Medical Services Branch in association with the University of Manitoba Faculty of Dentistry. Several second-year dental hygiene students were fortunate enough to accompany the dental students on their required externships to this area. Participation by dental hygiene students was on a voluntary basis. Our dental team consisted of one dentist, two fourth-year dental students and myself, a second-year dental hygiene student. We were in Rankin Inlet for two weeks in October of 1980. During those two weeks, as much dental treatment was provided as could be handled.

Oral health status of the Inuit people

It has been suggested that the Inuit people had, in earlier times, the lowest rate of dental caries in the world.¹ During the period from 1900 to 1960, the health of the Inuit dentition declined markedly from a state where many caries free adults could be found to one

which parallels or surpasses the caries rate found in southern Canada.

The major factor contributing to this oral health deterioration is the change in diet which now affects most of the Inuit people. With the continued penetration of the north by southerners and increased communication and air transportation facilities, even the most remote areas now have access to the processed foodstuffs of the south. These foods have changed the Inuit diet from one rich in protein, low in carbohydrate, and of detergent consistency, (caribou, bear, seal meat, lichens and grasses)², to one which is much softer in consistency and higher in sugar.

Other factors have also contributed to the decline in dental health. John T. Mayhew showed that the first permanent molars of Inuit boys and girls erupt six to ten months earlier than the first molars of southern Canadian children. Early eruption of the molars brings them into contact with the corrosive environment of the oral cavity considerably earlier, thereby increasing the probability of caries at an earlier age. Similarly, dental morphology seems to play a role in the Inuit predisposition to dental caries. Inuit people exhibit teeth which are strong and designed



An Inuit mother carries her child "papoose-style."

for maximal use and efficiency. Unfortunately, they also show characteristics which predispose the teeth to food entrapment: shovel-shaped incisors; premolar occlusal tubercles; and extremely well defined cusps and grooves.⁴

A diet high in fermentable carbohydrates, early eruption times, and food-entrapping tooth morphology, in combination with a lack of oral hygiene measures have had disastrous effects on the Inuit dental health. A survey done in Rankin Inlet in the spring of 1980 showed that a large segment of the school-aged population was in need of immediate dental care.⁵



Profound caries problem is typical of the Inuit patient.

Articles written by Curzon² and Stamm⁶ recommend the implementation of northern dental care programs. Our program offers students the opportunity to provide this care and combines it with the unique experience of seeing the Canadian north.

Clinical set-up

Our dental clinic was set up in the nurses' station of Rankin Inlet. All of our equipment was portable. At peak periods, we had four dental chairs in operation. At first we concentrated on the emergency cases, consisting largely of extractions. Later on, we were able to have two chairs for restorative work, one for extractions, and one for scaling and prophylaxis. Both an autoclave and chemiclave were available for use. Appointments were co-ordinated by a nurses aide, who also acted as our interpreter.

The most challenging cases I encountered in my dental hygiene education were during my short stay at Rankin Inlet, where I treated about seven patients per day. Gross amounts of plaque, materia alba, and calculus were usual, as well as large carious lesions and acutely inflamed tissues. Any oral hygiene home care measures were the exception rather than the rule, as many patients did not even own a toothbrush. I performed scaling, cavitroning, polishing, impression-taking, and chairside assisting.

Patient education consisted almost entirely



Skinning the trapper's catch is still women's work in the Inuit community of Rankin Inlet.

of brushing instruction for both adults and children and very often we had to work through an interpreter. It was possible to involve both parents and children in the dental health lesson which was a definite advantage in getting our message across. Diet, especially high sucrose intake, was discussed, but I believe any success in this area was minimal since cariogenic foods are so readily available, while wholesome alternatives such as milk, fruits, and vegetables are often impossible to buy.

Perhaps one of the most interesting aspects of our visit was the opportunity to see unusual dental anatomy and soft tissue abnormalities. Tubercles and shovel-shaped incisors, fistulas, cysts, and hyperkeratinization were seen frequently. An advanced exophytic growth of the mandibular labial mucosa which had begun to interfere with occlusion was observed in a young adult male, and was later biopsied in Churchill, Manitoba to determine its status. Such observations were invaluable to me as a student because they

removed oral pathology from the textbook pages and put it into real life.

A cultural experience

Working in Rankin Inlet was a valuable cultural experience, because even though the southern Canadian influence is quite apparent in this area, the people still maintain many of their traditions. Their language, Inuktituk, is taught in the school and is the only language used by many people. Renowned Eskimo artists live in the surrounding area and there are several places to purchase the world famous Eskimo carvings and wall hangings. Life in Rankin Inlet is truly geared to a different pace and governed by a set of different traditions.

It is unlikely that these small remote communities could support resident dental health professionals. Travelling dental teams coming into these areas seem to be the logical alternative. Using students in this capacity works well in that it serves the needs of both the community and the student. The Inuit people receive satisfactory dental care provided by the students working under supervision. The under-graduate, in return, receives valuable experience in treating and observing challenging and unusual cases at the same time as learning about the people, the geography, and the way of life of the Inuit people. □

References

1. **Zitzow, R.E.**, The relationship of diet and dental caries in the Alaska Eskimo population, *Alaska Medicine*, 21:10-11, 1979.
2. **Curzon, M.E.J.**, Dental caries in Eskimo children of the Keewatin District in the Northwest Territories, *J. Canad Dent Assn*, 9:342-5, 1970.
3. **Mayhall, J.T.**, The oral health of a Canadian Inuit community: an anthropological approach, *J. Dent Res.*, 56: special issue C, 55-61, 1977.
4. **Mayhall, J.T.**, Dental Morphology of Indians and Eskimos: Its relationship to the prevention and treatment of caries, *J. Canad Dent Assn*, 4:152-154, 1972.
5. **Gelskey, S.C. and P.G. Hando-Lowes**, Assessing the oral health status of Rankin Inlet's school children. *The Canadian Dental Hygienist*, 15:54-57, 1981.
6. **Stamm, J.W.**, Dentistry in Canada's Arctic, *McGill Dent Review*, 33:2-3, 1971.

About the author: Valdene Hildebrand is a 1981 graduate of the University of Manitoba's School of Dental Hygiene. She is currently living in Saskatoon, Saskatchewan and works in a private dental office there.

Overhanging Amalgam Restorations: Their Prevalence, Ramifications and Irradication

Shirley C. Gelskey, Dip. Dent. Hyg., B.S., M.P.H.

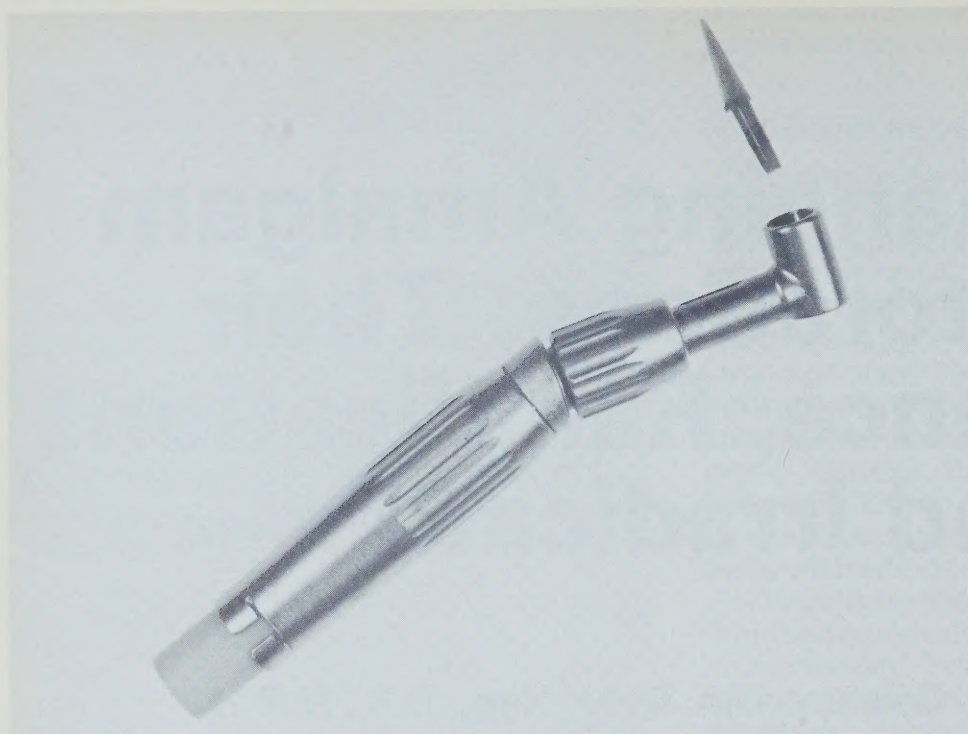
Subgingival amalgam restorations with margins which exhibit overhangs have been associated with gingival inflammation, loss of attachment, and bone loss, as demonstrated by numerous histological and epidemiological studies. As early as 1956, it was determined scientifically that: a) rough surfaces do not in themselves irritate the epithelial cells with which they come in contact; b) a rough tooth surface facilitates the retention of bacterial plaque; and c) restorations which are placed below the gingival tissue must be as smooth as possible.⁵ Even restorations which have been adapted well subgingivally have been found to cause gingival inflammation as a result of the presence of bacterial plaque rather than the mechanical or chemical irritation of the restoration.⁶

The relationship between amalgams with subgingival overhanging margins and gingival health was analyzed clinically in a recent study.⁴ Plaque accumulation, gingival inflammation and pocket depths were recorded at the baseline examination and at weeks four, eight and twelve of the study. Twenty-six defective premolar and molar amalgams in the same mouth were paired; test and control amalgams being allocated randomly.

Test amalgams were contoured to remove overhangs. All other procedures, namely scaling, polishing, and oral hygiene instruction were carried out with equal emphasis among the study population. It was concluded that the presence of a subgingival overhanging defective margin "may be the only important clinically significant feature of an amalgam restoration related to the pathogenesis of chronic inflammatory periodontal disease". The authors also concluded that overhang removal should be carried out during the initial phase of periodontal therapy.

"Overhang" defined

An overhang has been defined as an extension of restorative material beyond the margin of the cavity preparation and the surface of the tooth.⁷ Overhangs are caused generally during the placement of the restoration. An overhang may result from not using a matrix band and/or wedge or the improper placement of same. Overhanging restorations may also result from amalgam contraction or expansion following insertion. Faculty manipulation of the material at the time of



Eva Contra Angle and Tips are available through Weil Dental Supplies Ltd., 18 Harlech Court, Thornhill, Ontario L3T 2A1 (In Ontario 1-800-268-6802; elsewhere in Canada 800-268-6813).

insertion may weaken the margins and, thus, leave the restoration susceptible to fracture.^{7, 8, 9}

Detection of overhanging margins of amalgams may be carried out visually, radiographically, or tactilely.⁷ Although detection of large overhangs may be possible visually or radiographically, it has been noted that tactile clinical exploration is necessary to insure detection of all defective margins.^{1, 10}

Prevalence of overhanging restorations

An investigation into the prevalence of proximal overhangs within a group of adults and children was carried out by Coxhead and Simpson.¹ Of the 184 sets of bitewing radiographs examined, overhangs were detected on 1,094 of the 2,108 restored proximal surfaces, or 51.9 percent. The average number of overhangs per subject was 5.9 or 52 percent of his restored proximal surfaces. Only two of the 184 patients had no overhangs as determined radiographically.

The investigators felt that the figures obtained in their study were conservative in terms of indicating accurately the number of overhanging restorations which were present in the study population. The authors stated that large overhangs were obvious radiographically, but that their ability to

interpret the existence of small overhang by the use of radiographs was questionable. In addition, overhangs present on the buccal or lingual surfaces were not detected radiographically.

The prevalence of overhanging restorations was also studied among 1,976 individuals, aged 18 to 44 years.⁵ Thirty-two percent of all persons examined had one or more overhanging restorations. One third of a posterior teeth with proximal restoration had overhangs.

Removal of overhang vs. replacement of restoration

It is recognized that restorations with non-physiologic contours are the frequent cause of gingival and periodontal disease, and the consideration should be given to the elimination of such defects. In some instances, the only solution is replacement of the restoration. In many cases, however, the discrepancy in the restoration can be corrected with a more conservative approach.¹¹

Prior to making an attempt to remove an overhang, it must be determined that there is no recurrent decay associated with the restoration and that there are no fractures or open margins. In addition, should the restoration have an open contact or should there be other surfaces of the tooth involved in decay, it may

be advisable to proceed with a more extensive cavity preparation (e.g. MOD rather than MO) and/or to replace the existing restoration. It should also be noted that amalgam overhang removal (margination) is most successful when the restoration's defect is small or moderate in size. Replacement of the restoration should generally be considered for large marginal discrepancies.⁷

The correction of amalgam contour generally involves only the removal of excess material. Incorrect contours which are a result of insufficient material are usually corrected by the replacement of the restoration.¹² Margination and calculus removal are not similar procedures. Margination involves the 'shaving-away' of amalgam. One must not attempt to remove the overhang in one stroke as the material could easily fracture.

Selection of instruments

The selection of instruments used in recontouring the restoration is based on the nature of the marginal discrepancy as well as on the operator's preference.¹² Chisels, trimmers, surgical blades, and reciprocating motor-driven diamond tips were among the instruments analyzed in a recent *in-vitro* evaluation of the effectiveness of various instruments in removing overhanging restorations. Through the use of a tooth-surface profile tracing gauge and a scanning electron microscope, it was determined that the reciprocating motor-driven diamond tip (Eva Prophylaxis System) eliminated overhangs better than the chisel No. 24-25 (American Dental), the No. 12 surgical blade (Bard-Parker) or the Rhein Trimmer No. 31-32 (SS White).^{6, 13}

Gorzo *et al*,¹⁰ in a study carried out in 1979, used a combination of conventional burs along with an ultrasonic scaler (Cavitron 700, tips P1, P3, P10) in the removal of overhangs. The removal of overhangs was considered successful when there was no palpable transition between the tooth and the restored surface as evaluated by a modified Cross calculus probe.

Hand Instruments

Some operators⁷ feel that the amalgam knife (gold knife) is the most vital hand instrument in the armamentarium for removing overhangs. The amalgam knife is used to

shave away the amalgam's gross excess. Files may then be used to remove remaining amalgam, especially in the gingival area and on the buccal and lingual surfaces. Universal curettes would then be used to remove small extensions of the remaining amalgam. Discs and finishing strips would finish the margins, while floss with pumice would be used to polish the areas.

A. Amalgam Knife. The shape of an amalgam knife in cross-section is triangular. The apex of the triangle is the cutting edge. The operator should keep in mind that the cutting edge of the amalgam knife is angled more toward the tooth than the cutting edge of the sickle scaler. When the shaving stroke is taken with the amalgam knife, the posterior portion should remain against the tooth while the anterior portion is on the amalgam. Vertical and oblique strokes may be implemented while attention is given to avoiding the contact point.⁷

B. Files. There are a number of files that may be utilized to remove excess overhanging amalgam. They vary from heavy files (Orban), to medium files (Hirshfeld), to fine files (Rhein No. 31-32). The finest file should be utilized last to limit the number of striations left on the amalgam. The stroke used with the file is either oblique or horizontal.⁷

The file may be used with a pushing or pulling stroke with emphasis on avoiding injury to the tissue. The file should be moved so that the restorative material is carried toward the cavity margin.¹²

C. Universal scaler. A sharp universal scaler (U-15, H6-H7) may be used to remove excess amalgam as well. The blade of the instrument is placed apical to the defect. A short diagonal stroke, directed coronally and away from the gingival margin, will remove some of the excess. This shaving stroke is repeated until the restoration is carved into the contour of the tooth surface. The margin is then finished with sandpaper and linen strips and re-explored with a sharp explorer.

II Rotary Instruments

When access is adequate, rotating finishing burs or stones may be used to remove an overhang. Both hard and soft tissue injury must be avoided. An overhang which requires rotary instruments for correction may be better remedied by the replacement of the restoration.¹²

When utilized, the rotary instrument should be operated at a moderate speed using a light pressure.¹¹ The side of the bur should be operated at a right angle to the margin while it is rotated up into the overhang and, from the restoration to the tooth.

III Ultrasonic Scaling Devices

The operator may elect to use an ultrasonic device with an appropriate tip (e.g. P1, P3, P10) to facilitate the removal of an overhanging restoration. Once again short overlapping diagonal strokes should be implemented, thus avoiding amalgam fracture. Attention must naturally be given to the principles of operation of an ultrasonic scaler (i.e. constant motion, sufficient water cooling, tip adaptation, medical history contraindications).

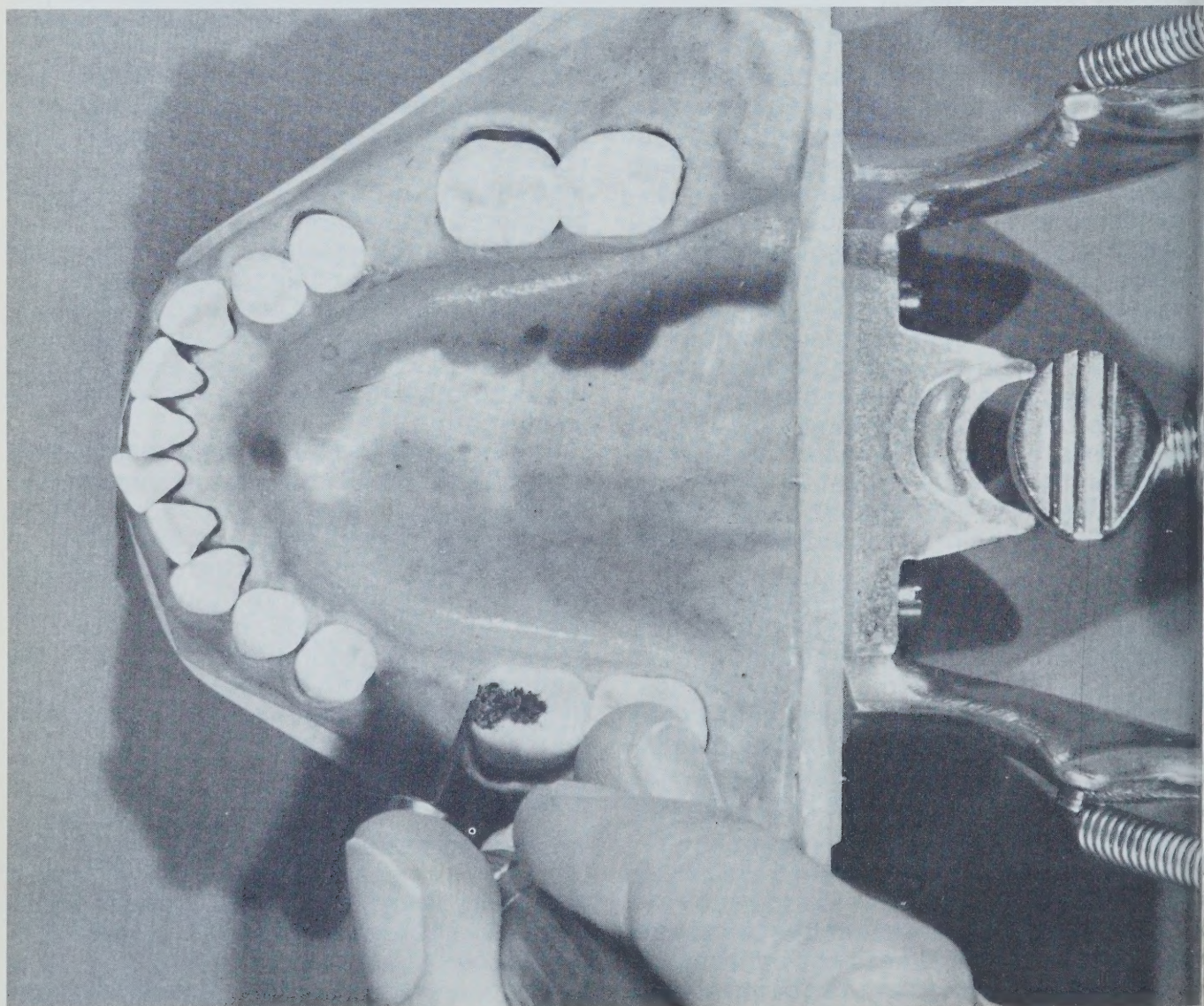
Another device, the Titan-S Sonic scaler,

can also be used. The technique is similar to that of an ultrasonic scaler.

IV Eva Prophylaxis System

Another approach to the removal of overhanging restorations has been introduced and researched by Dr. Per Axelsson with the Eva contra-angle system.¹³ The Eva system incorporates a contra-angle that, when attached to a slow-speed handpiece, permits a reciprocating (back and forth) movement of an Eva tip over a distance of approximately 1.5 mm. Utilizing paired abrasive diamond cones (attached by friction grip), the operator may smooth proximal restorations readily. (Photograph 1 and 2).

The operator must first select either the Eva 20 or Eva 21 diamond-coated tip before attempting to remove an overhanging restoration.



Proper Adaptation of Eva Contra Angle and Tip.

ion. Tip selection is based on the location and nature of the surface to be treated. The base of the triangle is placed at the base of the gingival embrasure so as to avoid trauma of the tissues as the tip oscillates in and out of the embrasure. The diamond coating is placed adjacent to the overhang. The tip is free to rotate on its long axis due to its rotatable piston, allowing it to easily reach all proximal areas.

Once the tip has been selected and inserted into the contra angle, position it on the surface to be treated. Again, locate the dimensions of the overhang with the tip, start the motor, and increase it to a suitable speed of about 6,000 rpm. Make short overlapping diagonal strokes with minimal pressure. Avoid placement on cementum or root surface. Re-evaluate the surface often during the procedure.

The Eva system also includes colour-coded, abrasive-coated plastic cones which may be used to polish the proximal surface.¹³ Polishing should always follow the use of diamond tips.¹⁴

Post-treatment evaluation

The operator must evaluate the success of margination upon completion of the procedure. The following considerations should be given: 1) the margins of the restoration are smooth, as determined by a sharp explorer; 2) the contact point is functional; 3) the contour of the restored proximal surface approximates its original contour; 4) no trauma has occurred to the adjacent hard or soft tissue; and 5) no excess amalgam or debris remains in the site.⁷

Summary and Conclusion

A review of the literature indicates that amalgam restorations with nonphysiologic contours are the frequent cause of gingival and periodontal disease. Further review suggests strongly that such defects should be eliminated early in treatment either through margination (overhang removal) or through replacement of the restoration.

A number of techniques for removal of overhangs of amalgam restorations have been discussed including the use of hand instruments, rotary instruments, ultrasonic and sonic instruments, and the Eva Prophylaxis System.

The criteria for post-treatment evaluation are cited.

It appears that there is no question regarding the necessity of including the elimination of overhang restorations in the early stages of treatment planning. Selection of the appropriate approach to this end will be based on the nature of the overhang (material, size, location) as well as on the personal preference of the operator.

The literature indicates that one of the newest modes of margination is the reciprocating Eva-Diamond System. Further study is required to identify the most efficient method of overhang removal. □

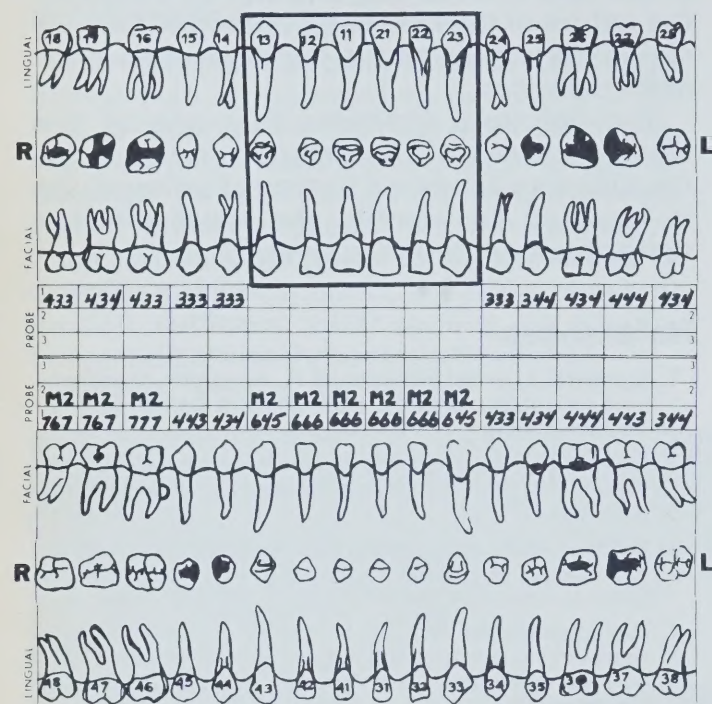
References

1. Coxhead, L.J. and Simpson, E.F., Amalgam overhangs — a radiographic study. *New Zealand Dental Journal*, 74:145-7, 1978.
2. Gilmore, N. and Sheiham, A., Overhanging dental restorations and periodontal disease. *Journal of Periodontology* 42:8-12, 1971.
3. Jeffcoat, M.K., and Howell, T.H., Alveolar bone destruction due to overhanging amalgam in periodontal disease. *Journal of Periodontology*, 51:599-602, 1980.
4. Rodriguez-Ferrer, H.J., et al., Effect on gingival health of removing overhanging margins of interproximal subgingival amalgam restorations. *Journal of Clinical Periodontology*, 7:457-62, 1980.
5. Waerhaug, J., Effect of rough surfaces upon gingival tissue. *Journal of Dental Research* 35:323-5, 1956.
6. Freitas-Vale, J.D. and Caffesse, R.G., Removal of amalgam overhangs: a profilometric and scanning electron microscopic evaluation. *Journal of Periodontology* 50:245-9, May 1979.
7. Woodall, I.R., et al., *Comprehensive Dental Hygiene Care*. C.V. Mosby, Toronto, 1980, 403-42.
8. Baum, L., *Advanced Restorative Dentistry: Modern Materials and Techniques*, W.B. Saunders, Toronto, 1973, iii-341.
9. Wilkins, E.M., *Clinical Practice of the Dental Hygienist*, 4th ed. Lea and Febiger, Philadelphia, 1976, 553-4.
10. Gorzo, I., et al., Amalgam restorations, plaque removal, and periodontal health. *Journal of Clinical Periodontology*, 6:98-105, 1979.
11. Allen, D.L., *Periodontics for the Dental Hygienist*, Lea and Febiger, Philadelphia, 1980, 166-7.
12. Castano, F., *Handbook of Clinical Dental Auxiliary Practice*, Lippincott, Philadelphia, 1980, 98.
13. Johannessen, L.B. (Translation) Axelsson, P., EVA system: A new adjunct for interproximal cleaning, finishing, and polishing. *Sverige Tandlakarforb Tidn* 61:1086-1104, No. 21, November 1969.
14. Ramfjord, S.P., Root planing and curettage. *International Dental Journal*, 30:93-100, 1980.

About the author: Mrs. Gelskey is an Associate Professor and Director of the School of Dental Hygiene at the University of Manitoba.

self assessment test

Case Presentation



Joe Lipton is a 48-year-old postal clerk. He is in reasonably good health, but has moderate hypertension, an excess weight of 35 lbs., and an incredible thirst. He complains of bleeding gums and loose teeth, and this is his first checkup in eight years. On examination, the lips, tongue, and oral pharyngeal regions are normal. Upon palpitation, there are discernable lymph nodes in the cervical region of his neck.

His oral hygiene is poor. There are heavy hard and soft deposits throughout and moderate tobacco stain cervically. The gingiva is swollen, edematous, and bleeds profusely on probing. Pocketing is in the 3 - 4 mm range except in the lower right posterior segment and the lower anteriors, where they are 6 - 7 mm. Mobility is evident in the lower right posterior segment and in the lower anterior teeth. There is a localized circumscribed purulent area of inflammation on the attached gingiva adjacent to the 46. Radiographic examination reveals recurrent caries on 16 and 25, angular bony defects in the lower anteriors and lower right posterior segment, and a radiolucent area visible lateral to the root of 46.

On completion of charting it was noted that all teeth are present except the upper anteriors, which have been replaced by a removable partial denture with the occlusal plane overextended.

- Which of the following systemic diseases is also adversely affecting Mr. Lipton's periodontium?
 - Rheumatic heart disease
 - Diabetes mellitus
 - Hyperthyroidism
 - Acromegaly
 - Anemia
- Based on your answer for #1, the systemic disease will affect the periodontium because it:
 - initiates inflammatory changes in the gingival tissue.
 - alters the susceptibility of the periodontal tissues to local irritants.
 - causes destruction of collagen and elastic fibers of the periodontal ligament.
 - causes an increase in mobility.
 - initiates pocket formation.
- Based on the intra-oral and radiographic findings, Mr. Lipton's maxillary arch has:
 - chronic periodontosis.
 - chronic periodontitis.
 - chronic gingivitis.
 - necrotizing ulcerative gingivitis.
 - desquamative gingivitis.
- The histologically noted changes for Mr. Lipton's maxillary arch are:
 - vasodilation, engorgement, hyperemia and proliferation of capillaries.
 - vasostagnation and retention of tissue fluids.
 - microulcerations of the epithelium of the sulcus.
 - vasodilation and destruction of gingival collagen fibers.
 - influx of inflammatory cells, principally plasma cells, lymphocytes and macrophages.
 - i, ii, and v
 - i, ii, iii, and v
 - i, ii, iv, and v
 - i, ii, iii, and iv
 - i, ii, iii, iv, and v
- During the initial therapy phase, Mr. Lipton is given:
 - an explanation of the etiology of his dental disease.
 - instruction in plaque control.
 - nutritional counselling.
 - thorough scaling, curettage and root planing.
 - preliminary occlusal equilibrations.
 - i, iii, and iv
 - i, ii, and iv
 - i, ii, iii, and iv
 - i, ii, iii, and v
 - i, ii, iii, iv, and v

The radiolucent area located lateral to the tooth of 46 is most likely:

- a) a cementicle.
- b) the mental foramen.
- c) part of the mandibular canal.
- d) a periapical abscess.
- e) a periodontal abscess.

The most probable etiology for the changes noted in the lower anterior region is:

- a) poor oral hygiene only.
- b) primary occlusal trauma.
- c) secondary occlusal trauma.
- d) hypertension.
- e) none of the above.

The best treatment for the lower anteriors is:

- i) full mouth occlusal adjustment.
 - ii) orthodontic movements to realign the axial forces.
 - iii) acrylic splinting.
 - iv) occlusal adjustment of the removable partial denture.
 - v) extraction of the lower anterior teeth.
- a) v only
 - b) iii only
 - c) i and iii
 - d) iii and iv
 - e) i, ii, iii, and iv

During the initial scaling appointment, Mr. Lipton

experiences a radiating pain to the left arm and left side of the jaw. This is probably related to:

- a) arthritis.
- b) rheumatic fever.
- c) cervical lymphadenopathy.
- d) improper chair position.
- e) coronary occlusion.

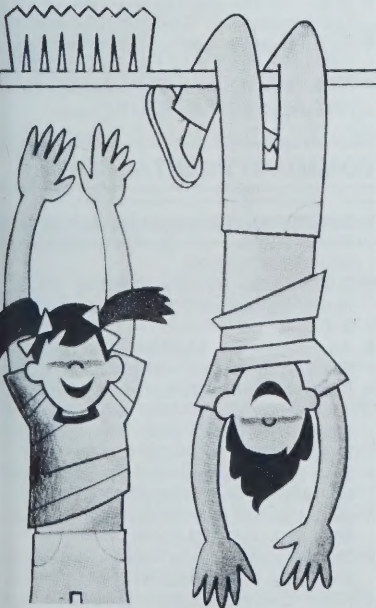
10. The 6 and 7 mm pockets:

- i) can be cleaned satisfactorily with a water irrigating device.
 - ii) can be cleaned satisfactorily with a toothbrush and unwaxed floss.
 - iii) cannot be cleaned satisfactorily by the patient.
 - iv) require surgery to reduce the depth to one that can be maintained in a clean, healthy state by the patient.
 - v) require fluoride.
- a) i and v
 - b) ii and v
 - c) iii only
 - d) iv only
 - e) iii and iv

Evie Jesin
Harriet McCabe
Teaching Masters, George Brown College

Answers to Self-Assessment Test:
1. b 2. b 3. c 4. e 5. e
6. e 7. c 8. d 9. e 10. e

Un sourire,
un ami



Good Mouth
Keeping

Ministry of Health, Dental Hygienists

Competition 38A —

\$20,784–\$23,808

There are currently eight excellent opportunities available throughout B.C. for career-minded enthusiastic hygienists. Competition will also establish an Eligibility List for future vacancies. Duties include assuming responsibility for pre-school, school and adult dental programs, delivering educational/motivational lessons, inspections/referrals and supervising staff; other related duties as required.

Qualifications — Graduation from recognized university with diploma in dental hygiene or equivalent. May be required to drive personal car on expenses or Government car.



Province of British Columbia
Public Service Commission

Positions
are open to both
men and women.
Please send resume
quoting competition number to:

544 Michigan Street, Victoria, B.C., V8V 1S3

1982~83 directory

EXECUTIVE COUNCIL:

- **PRESIDENT:** Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ont. L4W 2B7 Res. (416-624-3495) (May '82 - Sept. '83).
- **PRESIDENT ELECT:** Mary Pelletier, Box 18 Site 5, RR#7, Moncton, New Brunswick E1C 8Z4 Res. (506-384-8728).
- **FIRST VICE-PRESIDENT:** Laura Mowat, 11424 - 161 Ave., Edmonton, Alberta T5X 2L0 Res. (403-456-0977).
- **SECRETARY:** Peggy Knill, 164 Hillcrest Ave., Hamilton, Ontario L8P 2X4 Res. (416-525-5788).
- **TREASURER:** Judi Rogers, 1903 Sherwood Forest Circle, Mississauga, Ont. L5K 2E6 Res. (416-823-3822).
- **IMMEDIATE PAST PRESIDENT:** Patricia Grant, 3 Linden Lane, Halifax, Nova Scotia B3R 1N1 Res. (902-453-4761) Bus. (902-477-9876).

THE BOARD OF DIRECTORS:

- **BRITISH COLUMBIA:** Yvonne Smith, R.R. 3, Gartley Beach, Courtenay, B.C. V9N 5M8 (604-338-6470); Barbara Custance, 1892 Cochrane St., Victoria, B.C. V8R 3H3 (604-592-4105); Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- **ALBERTA:** Barbara Kara, 4112 - 27 Ave., Edmonton, Alberta T6L 4G9 (403-263-5513); Vicki Duncanson, 1629 - 20 Ave. N.W., Calgary, Alberta T2M 1G9 (403-284-2628).
- **SASKATCHEWAN:** Barbara Ferris, 5107-222 Fairmont Drive, Saskatoon, Saskatchewan S7M 4P5 (306-382-3348).
- **MANITOBA:** Gladys Stewart, 454 Niagara St., Winnipeg, Man. R3N 0V5 (204-453-1574).
- **ONTARIO:** Linda McCance, 5027 Wixon Street, Clairmont, Ontario L0H 1S0 (416-649-2056); Ailsa Wood, 505-160 Balmoral Avenue, Toronto, Ontario M4V 1J7 (416-923-1669); Dale Scanlan, 53 Ariel Court, Nepean, Ont. K2H 8J1 (613-828-7962); Linda Perron, 712-101 Governor's Road, Dundas, Ontario L9H 6L7 (416-627-7193); Susan Leroux Knox, 3558 Dawson Road, Thunder Bay, Ontario (807-767-1358); Carolyn Roth, 184 Greenbrook Drive, Kitchener, Ontario N2M 4J7 (519-745-6664); Lise Thom, Box 293, Russell, Ontario K0A 3B0 (613-445-2892); Fern Waldman, 265 Balliol St., #2307, Toronto, Ont. (416-488-5364).
- **QUEBEC:** Lucie Billette-Raychat, 4641 Cumberland Street, Montreal, Quebec H4H 2L5 (514-486-3743).
- **NEW BRUNSWICK:** Barb McCain, 151 Canterbury Street, St. John, N.B. E2L 2E2 (506-693-5152).
- **NOVA SCOTIA:** Lisa Macdonald, 3450 St. Andrews Avenue, Halifax, N.S. B3L 3Y1 (902-455-1048).
- **PRINCE EDWARD ISLAND:** Jean MacLean, 6 Newland Crescent, Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- **NEWFOUNDLAND:** Ingrid Curtis, 67 Roche Street, St. John's, Nfld. A1B 1L9 (902-894-3294).

SPECIAL COMMITTEE CHAIRMEN:

- **CONTINUING EDUCATION:** Mickey Wener,

498 Montrose Street, Winnipeg, Man. R3M 3M9 (204-284-7474).

- **EDUCATION:** Margaret Miller, 404 - 188 Roslyn Rd., Winnipeg, Man. R3L 0G8 (204-284-7474).
- **FINANCE:** Judi Rogers, 1903 Sherwood Forest Circle, Mississauga, Ont. L5K 2E6 (416-823-3822).
- **STUDENT MEMBERSHIP:** Lise Thom, Box 293, Russell, Ont. K0A 3B0 (613-445-2892).

APPOINTEE OFFICERS:

- **EXECUTIVE SECRETARY:** Thora Appelt, 2136 Fillmore Crescent, Ottawa, Ontario K1J 6A4 (614-746-6455).
- **EDITOR:** Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2 (519-254-6224).
- **BOOKKEEPER:** Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (416-923-1669).

EXECUTIVE APPOINTMENTS:

- **SPEAKER FOR THE BOARD:** Jo Gardner, 1125 West 54th Ave., Vancouver, B.C. V6P 1N3 (604-261-8642).
- **CONVENTION CHAIRMAN:** 1983: Evelyn McNee, 1509 Lynn Valley Rd., North Vancouver, B.C. V7J 2B1 (604-987-2821).
- **A.C.F.D. DENTAL HYGIENE:** Kate MacDonald, 3914 Novalea Dr., Halifax, N.S. B3K 3G7 (902-445-8868).
- **DENTAL AUXILIARY LIAISON OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Saskatchewan, S4T 1L6 (306-569-1603).
- **INTERNATIONAL LIAISON CHAIRMAN:** Sharon French, 39 Chinook Cres., Nepean, Ontario K2H 7C9 (613-820-1196).
- **DATA BANK REPRESENTATIVE:** Pat Johnson, Oak Deane, R.R. 2, Aurora, Ontario L4G 3C8 (416-727-1433).
- **CDA COUNCIL ON HEALTH CARE:** Kate MacDonald, 3914 Novalea Dr., Halifax, N.S. B3K 3G7 (902-445-8868).
- **CDA COUNCIL ON EDUCATION:** Margaret Miller, 404 - 188 Roslyn Rd., Winnipeg, Man. R3L 0G8 (204-284-7474).
- **CSA TECHNICAL COMMITTEE ON DENTISTRY:** Anne Bosy, 1529 Ballyclare Drive, Mississauga, Ontario L5C 1J4 (416-270-4019).
- **OFFICER OF CDHA ORGANIZATION AND PROCEDURES:** Marjorie Dimitri, 1606 Ayleslynn Drive, North Vancouver, B.C. V7J 2T3 (604-987-7392).
- **PORTABILITY OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Sask. S4T 1L6 (306-569-1603).
- **MEMBERSHIP PROMOTION CO-ORDINATOR:** Debbie Lang.

STANDING COMMITTEES:

MEMBERSHIP:

- **CHAIRMAN:** Jo Gardner, 1125 West 54th Ave., Vancouver, B.C. V6P 1N3 (604-261-8642).
- **B.C.:** Holly Wilson, 1575 Montgomery Ave., Victoria, B.C. V8V 1T5 (604-595-7980).
- **Alta:** Linda Klem, 28 Erin Mount Cr. S.E., Calgary, Alta. T2B 2S3 (403-273-8434).

- **Sask.:** Darlene Armstrong, 43-35 Centenn St., Regina, Saskatchewan S4S 6P8 (306-586-9457).
- **Man.:** Darlene Armstrong, 43-35 Centenn St., Regina, Saskatchewan S4S 6P8 (306-586-9457).
- **Ont.:** Kathleen Feres-Patry, 10C Stoneh Crt., Kanata, Ont. K2M 1G2 (613-592-5934).
- **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-3743).
- **N.B.:** Brenda Dickie, Bldg. 6, Apt. 3, Greenwood Park, R.R.6, Rothesay, N.B. E0G 2V (506-849-2701).
- **N.S.:** Diane Dobson, 242 Duke Street, Apt. Chester, N.S. B0J 1J0.
- **P.E.I.:** Florence Wall, Mt. Herbert, R.R. Charlottetown, P.E.I. C1A 7J8 (902-562-2079).
- **Nfld.:** Coleen Thomey, P.O. Box 544, Mount Pearl, Nfld. A1B 2W4.

MANPOWER AND UTILIZATION:

- **CHAIRMAN:** Jenny Thomas, 2759 Selina Street, Ottawa, Ont. K2B 6P8 (613-820-0400).
- **B.C.:** Randy McIlraith, 301 - 1629 Haro Street, Vancouver, B.C. V6G 1N8 (604-684-2813).
- **Alta.:** Drene Bertrand, 1074 - 56th St., Edmonton, Alta. T6L 1Y3 (403-489-6898).
- **Sask.:** Bev Upton, 143 Bothwell Cres., Regina, Sask. S4R 5Y7 (206-545-7563).
- **Man.:** Ruth Konzelman, 105 Olivier Ave., Selkirk, Man. R1A 0C4 (204-482-6112).
- **Ont.:** Jenny Thomas, 2759 Selina Street, Ottawa, Ontario K2B 6P8 (613-820-0400).
- **Que.:** Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Quebec H4H 2L5 (514-486-3743).
- **N.B.:** Sharyn Milroy, 85 Oakmore Terrace, Moncton, N.B. E1G 1T4 (506-384-1961).
- **N.S.:** Linda Zambolin, 114 Regal Park, Dartmouth, N.S. B2W 4H8 (902-434-8983).
- **P.E.I.:** Heather Keith, 4 Belvedere Ave., Charlottetown, P.E.I. C1A 6A8 (902-892-9361).
- **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's, Nfld. A1B 1L9 (709-722-1603).

COMMUNITY DENTAL HEALTH:

- **CHAIRMAN:** Joanne Clovis, Seventh Plaza, 10030 - 107 St., Edmonton, Alta. T6E 4C4 (403-476-6596).
- **B.C.:** Karen Fawley, 305-252 W. 2nd North Vancouver, B.C. V7M 1C8 (604-937-3762).
- **Alta.:** Heather McElroy, General Delivery, Stettler, Alta. (403-742-5543).
- **Sask.:** Maureen Bowerman, 51 Huron Plaza, Saskatoon, Sask. S7K 4E8 (306-664-3010).
- **Man.:** Sharon McLean, 1400 Argyle St., Regina, Sask. S4T 3S1 (306-525-3289).
- **Man.:** Ruth Konzelman, 105 Olivier Ave., Selkirk, Man. R1A 0C4 (902-482-6122).
- **Ont.:** Laurie Lepik, 70 Sixth St., Toronto, Ont. M8V 3A2 (416-259-6078).
- **Que.:** Lucie Billette, 4641 Cumberland St., Montreal, P.Q. H4H 2L5 (514-486-3743).
- **N.B.:** Connie Maddox-Campbell, 860 Ave., Bathurst, N.B. E2A 1W1 (506-891-9161).
- **N.S.:** Terry Mitchell, 1676 Larch St., Apt. 1, Halifax, N.S. B3H 3X1.
- **P.E.I.:** Pat Stewart, Travellers Rest, Summerside, P.E.I. (902-436-2709).

• Nfld.: Ingrid Curtis, 67 Roche St., St. John's, Nfld. A1B 1L9 (709-722-1603).

NOMINATIONS:

- CHAIRMAN: Mary Pelletier, Box 18, Site 5, R.R.7, Moncton, N.B. E1C 8Z4 (506-384-8728).
- B.C.: Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- Alta.: Paulette Schulte, 10947 - 36A Ave., Edmonton, Alt. T6J 0E3 (403-434-0925).
- Sask.: Barb Long, 2741 Preston Ave., Saskatoon, Sask. S7G 3G2 (306-373-7434).
- Man.: Kim Harrop, 658 Government Ave., Winnipeg, Man. R2K 1X2 (514-667-0831).
- Ont.: Dale Scanlan, 53 Ariel Ct., Nepean, Ont. K2H 8J1 (613-828-7962).
- Que.: Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-3743).
- N.B.: Pam Mosher, 1064 Salisbury Rd., Moncton, N.B. E1E 3V6 (506-855-2815).
- N.S.: Yolanda Bresolin, 16½ Sunset Court, Truro, N.S. B2N 3W1.
- P.E.I.: Jean MacLean, 6 Newland Cres., Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- Nfld.: Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).

CONSTITUTION:

- CHAIRMAN: Laura Mowat, 11424 - 161 Ave., Edmonton, Alta. T5X 2L0 (403-456-0977).
- B.C.: Barbara Custance, 1892 Cochrane St., Victoria, B.C. V8R 3H3 (604-592-4105).
- Alta.: Marg Wilson, 8739 - 67 Ave., Edmonton, Alta. T6J 0E3 (403-434-0925).
- Sask.: Joan Foster, 545 Laurier Drive, Swift Current, Sask. S9H 1L3 (306-713-8754).
- Man.: Louise Dufault, 82 Reil St., Winnipeg, Man. R2M 0Y2 (204-256-9115).
- Ont.: Jasmine Holetich, 1871 King E., Hamilton, Ont. L8K 1V1 (416-549-5048, 525-9140).
- Que.: Lucie Billette-Raychat, 4641 Cumberland St., Montreal, Que. H4H 2L5 (514-486-3743, 937-0511).
- N.B.: Trudy McAvity, Box 949, Rothesay, B.C. E0G 2W0 (506-847-5502).
- N.S.: Linda Zambolin, 114 Regal Road, Dartmouth, N.S. B2W 4H8 (902-434-9893).
- Nfld.: Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).
- P.E.I.: Debbie Richard, 19 Milbrooke Dr., Charlottetown, P.E.I. C1A 7V2 (902-569-4490).

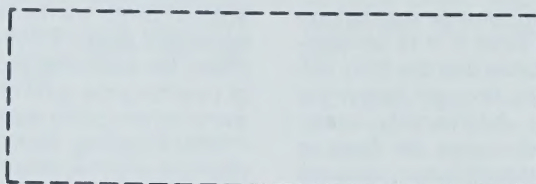
PROVINCIAL NEWSLETTER EDITORS:

- B.C.: Pat Bowman, 926 W. 22nd Ave., Vancouver, B.C. V5Z 2A1 (604-736-0962).
- Alta.: Adeline Fioriello, 8911 - 138 Ave., Edmonton, Alta. T5E 2A7.
- Sask.: Marg Bailey, Box 2228, Kindersley, Saskatchewan S0L 1S0 (306-463-2397).
- Man.: Joanne Presunka, 139 Hawkins, Winnipeg, Man., R2N 1H9 (204-254-8203).
- Ont.: Jane Rogers, 10 Lyle Place, Kitchener, Ontario N2B 2J6 (519-576-3718).
- Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1 (514-352-6245).
- N.B.: Nancy Mills, 20 Wilson Rd., Riverview, N.B. E1B 2V8 (506-386-3734).
- N.S.: Diane Forrest, 209-7 Parker St., Dartmouth, N.S.; Cindy Forward, Oyster Pond, Jeddore, N.S.
- Nfld.: Pam Vokey, P.O. Box 205, Gander, Newfoundland A1V 1W6.
- P.E.I.: Frances Piercey, 3 Sunset Drive, Charlottetown, P.E.I. C1A 3J6. □

Help Us Cut Costs

Did you know it costs the CDHA 45¢ for each address correction given by the post office? To remain that returned journal once the new address has been located costs us another 45¢, making our bills for postage due run into several hundred dollars a year.

Help us avoid this expense. Send us your change of address as soon as you know you'll be moving. We'll save money, and you'll continue to receive **The Canadian Dental Hygienist** without interruption. If you're moving, please detach the address label on your envelope, correct it, then paste it in the blank provided & mail this. . . .



Name _____
Address _____
City _____
Province _____
Postal Code _____

Mail to: Jo Gardner, CDHA Membership Chairman
1125 West 54th Avenue
Vancouver, B.C. V6P 1N3

DENTAL HYGIENE RESEARCH CONFERENCE

DATES

Thursday and Friday
September 30 and October 1, 1982

LOCATION:

University of Manitoba
Winnipeg, Manitoba

KEYNOTE SPEAKERS:

International leaders in dental and dental hygiene research as well as other health disciplines will focus in on topics such as how to start off on the right foot, funding agencies, dental hygiene research and researchers in the USA, educational research, health and manpower issues, and research on services for special groups.

WHO MAY ATTEND:

Invited dental hygienists and others who have an interest in dental hygienist research. If you are interested in participating, write to:

Mrs. Marnie Forgay
Professor, School of Dental Hygiene
Faculty of Dentistry,
University of Manitoba
780 Bannatyne Avenue
Winnipeg, Manitoba
R3E 0W3

FINANCIAL HELP FOR PARTICIPANTS:

Invited participants and a limited number of other participants may be able to receive financial support to attend the conference, depending upon available funds.

CONFERENCE FUNDING:

Requests for funding the conference are being submitted to a number of national agencies and associations including the National Health Research and Development Program, the Canadian Dental Hygienists' Association, the Canadian Fund for Dental Education as well as the University of Manitoba.

abstracts

Healing of the dentoepithelial junction following flossing

Floss is used to remove supragingival plaque, but even if it is unintentional, it is inevitable that the floss will to some extent be brought below the gingival margin. Additionally, many patients purposely press the floss as far into the pocket as they can. Because little is known of the effect that floss has on the tooth surface and what reactions it sets up in the soft tissue wall of the pocket, we assessed the effect of floss in children with healthy gingiva.

Seven children undergoing orthodontic treatment participated in the study. Floss, fixed in a floss holder, was inserted into the pockets on the mesial surfaces of 28 first premolars, to the extent that the patient felt pressure, but he was told to give a signal if the slightest sensation of uneasiness was felt. The distal surface of the premolar served as the control. Observation periods ranged from 15 minutes to three weeks; the teeth were then extracted and examined under a stereomicroscope.

On examination, the control surfaces were covered with a more or less continuous layer of junctional epithelial cells. These cells were not detected on the experimental — flossed — surfaces 15 minutes and 24 hours after they had been detached by floss. New epithelial cells were found to reattach to the enamel after three days. After two weeks or more, the cell population on the experimental surfaces could not be distinguished from that on the control surfaces.

One patient volunteered to use the floss daily for 3½ months. There had been no reattachment of junctional epithelial cells to the enamel, but there was nothing to indicate that the flossing had had unfavorable consequences. [Waerhaug, Jens (deceased). Oslo, Norway. Healing of the dentoepithelial junction following the use of dental floss. *J Clin Periodontol* 8(2): 144-150, 1981]

Bite mark lesions in human skin

With increasing frequency, bite mark

analysis has become part of the police investigation in cases of violence and assault; the final analysis is left in the hands of a forensic dental expert.

In its simplest form, a bite mark consists of tooth marks produced by antagonistic teeth. A complete bite mark offers the examiner increased chances of reaching the goal of identifying the owner of the guilty teeth.

While fighting with a burglar, a 64-year-old man received several lesions on his naked back and indicated he had been bitten. Evidence submitted to dental experts consisted of several color photographs taken at a local hospital 36 hours after the incident, and of wax bites from two suspects, A and B. As the material as submitted did not allow clear conclusions to be drawn, a series of simulated bites was made with plaster models of A and B on the naked back of a volunteer. The additional information gained by this method allowed the dental examiners to submit a report stating that A could not be the perpetrator, but that B very likely was.

In this case, conditions seemed favorable for trying to produce test bite for comparison. An acceptable photograph of the criminal mark was available and, in this case, the tooth marks were crust-covered lesions that stood out distinctly despite 36 hours having elapsed before they were photographed. Finally, characteristics such as displacement, rotation, and incisal abrasion or fracture are those best disclosed in a bite mark on skin; at least two were present in the mark under consideration. [Jakobsen, Jan R., and Keiser-Nielsen, Soren. Royal Dental College, Copenhagen, Denmark. Bite mark lesions in human skin. *Forensic Sci Int* 18(1):41-55, 1981]

Diet and human behavior

Considerable interest centers on the purported relationship between diet and behavioral disorders such as hyperkinesis, learning disabilities, and juvenile delinquency.

The most publicized hypothesis is that advanced by Feingold, an allergist, who proposes that synthetic food

colors and flavors and salicylates toxically cause hyperactivity and learning disabilities in genetically predisposed children. Adhering to a diet eliminating these substances (the K-P diet) reportedly elicited a dramatic behavioral improvement in 30% to 50% of hyperactive children.

Although far from conclusive, the suggestion has been made that food allergy (that is, an immunologically mediated adverse reaction to food) in children may be responsible for behavioral disturbances, ranging from hyperactivity to lassitude to criminal behavior. Children with a diagnosis of minimal brain dysfunction are reputed to have a greater than average frequency of food allergy. Although entirely speculative, an interesting concept is that an adverse response to foods may be dependent on the amount of food consumed. An individual who is weakly sensitive to a number of foods might develop allergic symptoms and hyperactivity if a large quantity of sensitizing foods is consumed within a short period.

High carbohydrate intake, especially simple sugars, is suggested as a possible contributing or causative factor of antisocial behavior, hyperactivity, and juvenile delinquency, as well as other types of undesirable behavior. It is hypothesized that dietary choices may influence neurotransmitter synthesis and, ultimately, behavior.

Advocates of megavitamin therapy or orthomolecular psychiatry argue that use of vitamins (with or without mineral supplements) in doses greatly exceeding the recommended dietary allowances is a valid approach for treating mental and behavioral disorders, such as schizophrenia and hyperkinesis, respectively. Most claims made by megavitamin advocates are found in lay publications or in journals that support the practice and accept papers for publication that fail to meet the requirements of scientific protocols. Reports regarding the efficacy of megavitamins in these regards are based largely on uncontrolled studies and anecdotal observations. [Dair Council Dig 52(3):13-17, 1981]

Copyright by the American Dental Association. Reprinted by permission from DENTAL ABSTRACTS.

classified ads

ORIGINAL HYGIENE HASTY NOTES by
 e Scott©. To order your package of
 notes (4 different situations in all)
 nd your \$4.00 cheque or money
 der to: The Toronto Central Comp-
 nt Dental Hygiene Society,
 atherine Barlow, 715 Don Mills Road,
 ot. 2208, Don Mills, Ontario M3C 1S5.

all for Applications for the Position of
 EXECUTIVE SECRETARY. The Cana-
 an Dental Hygienists' Association is
 eking an Executive Secretary. The
 ccessful candidate must live in close
 oximity to the Ottawa area, and
 ould be a person with excellent sec-
 etarial skills, who would be responsi-
 e for providing administrative sup-
 rt to the elected officials of our As-
 ciation. This is a part-time position
 d salary is commensurate with ex-
 erience. Please reply in writing before
 pt. 15 1982 to: CDHA President, 1755
 ough Beeches Blvd. Mississauga, On-
 io L4W 2B7.

DENTAL HYGIENIST or AUXILIARY
 quired by Cameron Dental Clinic in

Yellowknife, NWT. Newly opened
 clinic, extremely busy with excellent
 supportive and happy staff. Yel-
 lowknife population approx. 12000.
 Young and lively town with lots of ac-
 tivities both in summer and winter. Ex-
 cellent opportunity for anyone. Please
 contact Drs. H. Adam or H. Biati, P.O.
 Box 1025, Yellowknife, NWT. X0E 1H0.
 Phone 403-920-2225.

HYGIENIST required, part or full-time,
 for busy preventive dental practice.
 Apply in writing to Dr. W.H. Moebus,
 35 King St., E., Cobourg, Ontario K9A
 1K6.

SUNNY INTERIOR OF BRITISH COL-
 UMBIA. DENTAL HYGIENIST — to join
 team of hygienists in a one dentist fam-
 ily preventive practice. Phone Cherrie
 (604) 579-8727 office or (604) 579-5788
 home.

Opening for DENTAL HYGIENIST, 20 -
 30 hours/weekly. Modern, patient-
 oriented office. Contact Dr. Deborah

Hallinan, Chilliwack, British Columbia
 792-3325 or 795-3077.

DENTAL HYGIENIST required part-
 time, 1 day/week, Vancouver, W.
 Broadway. Must like people. Top sal-
 ary paid! #245 - 2184 West Broadway,
 Vancouver, B.C. V6K 2E1 (604) 731-
 9281-2.

VICTORIA, B.C. Full-time HYGIENIST
 for preventive, perio conscious, family
 practice. No appointment pressure, no
 time restrictions per patient, hygienist
 rebooks as she feels necessary. Prac-
 tice has had hygienist for 8 years.
 Please contact Dr. Murray Kosick col-
 lect 656-3321 office, 656-2976 resi-
 dence.

Exciting opportunity to work with a
 team of hygienists and their assistants
 in private practice. Top salary plus
 generous benefits, four day week. Clin-
 ical freedom. Please contact Cherrie
 Horton, 604-579-8727, Cedar Dental
 Centre, 3122 Westsyde Road, Kam-
 loops, B.C. □

WETOKA HEALTH UNIT

requires:

Position: Full-time Dental Hygienist to be
 a member of a highly qualified Dental
 Team promoting a progressive dental
 public health program, position available
 August 16, 1982, for the Wetaskiwin
 office.

Responsibilities include:

- implementation of preventative
 school dental health program.
- classroom teaching
- community education
- geriatric program
- preventive dental hygiene clinics for
 4-10 year olds.

Qualifications:

- recognized Diploma in Dental
 Hygiene and certification by the
 Coordinating Council of the University
 of Alberta

Excellent employee benefits. Salary
 commensurate with experience.

Please apply, in writing, stating
 qualifications and experience, to:

Mrs. Betty Grayson
 Personnel Officer
 Wetoka Health Unit
 5201-49th Ave.
 Wetaskiwin, Alta.
 T9A 0R1

Ministry of Health Regional Supervising Hygienist

Competition H82:868A-23

\$23,076-\$26,940

In **Cranbrook**, supervise all dental auxiliary staff; apply
 policies and standards into field operations; specific plan-
 ning, delivery, monitoring of pre-school and adult com-
 munity, preventive dental programs; orientate, train and
 evaluate staff; prepare budgets, reports; establish goals
 and develop community liaison systems.

Qualifications — Graduate of accredited School of Dental
 Hygiene; demonstrated ability to manage staff effectively;
 several years satisfactory experience in dental public
 health.

Return applications to the Public Service
 Commission, 544 Michigan Street,
 Victoria V8V 1S3 IMMEDIATELY.



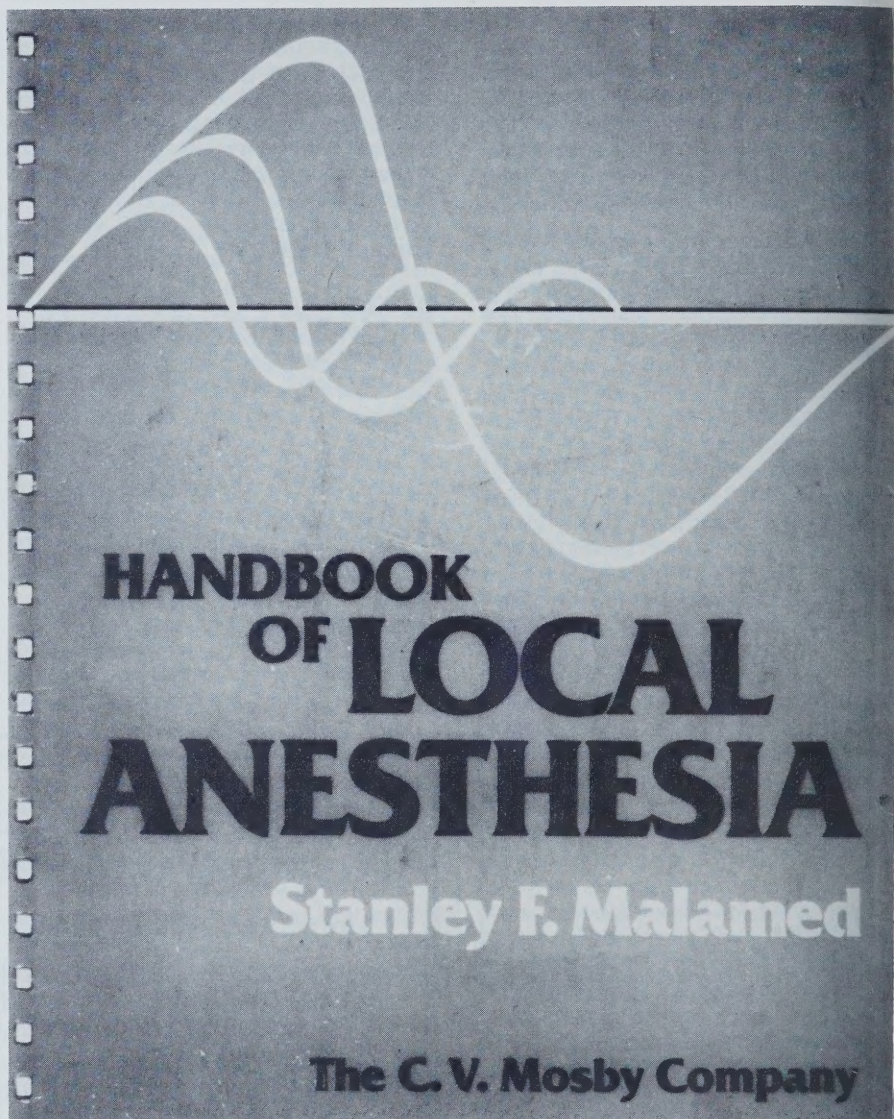
Province of British Columbia
Public Service Commission

In
 order
 to be
 considered,
 resume quoting
 competition number must
 be received at the appropriate
 address by the indicated closing date.
 Positions are open to both men and women.

book review

HANDBOOK OF LOCAL ANESTHESIA. Stanley F. Malamed. The C. V. Mosby Company, Toronto. 1980. Pages: 249; Illustrations: 286; Price: \$23.00.

This textbook is one of a number of new books published during the past two years reflecting renewed interest and recent advances in local anesthesia in dentistry. This book is aimed at "students of dentistry". Practising dental hygienists as well as dental hygiene students would certainly find the book useful. Divided into four parts; Drugs, Armamentarium, Techniques, and Complications and Questions, this book is well written and organized, up-to-date, and best of all, it has a quality of being authoritative and relevant. The chapter on Questions discusses a number of important clinical situations that all too often arise for students and practitioners and may be difficult to manage appropriately. Sections emphasizing an automatic injection technique and precise guidelines regarding needles, volume of solution injected, and patient management are valuable to all students of local anesthesia. The author's talent as an educator and practitioner is evidenced by the clear style and pertinent information throughout this book. Material covering some of the newer long-acting agents and the Gow-Gates mandibular block, a technique gaining acceptance as a use-



ful alternative to the classical inferior alveolar nerve block, reflects the up-to-date nature of this publication. There is little to criticize in the book. However, the author's recommendation of the "self-aspirating" dental syringe is presently not supported by scientific studies or evidence of efficacy or superiority over conventional harpoon-type aspirating syringes. The book is soft covered, spiral ring bound, and well illus-

trated. It is recommended highly to all "students of dentistry." ☐

Burton H. Goldstein
D.M.D., M.S.
Assistant Professor, Oral
and maxillofacial Surgery
University of
British Columbia

Bonnie J. Craig, R.D.H.
Assistant Professor
Program of Dental Hygiene
University of
British Columbia

Dental Hygienists

Get the facts now
about the challenge and
opportunity of a
Canadian Forces career.

If you have successfully completed a community college program and have certification as a Registered Dental Hygienist, you may join the Canadian Armed Forces.

The Canadian Forces offer steady employment, accelerated promotion, modern equipment, good income, fringe benefits, and a rewarding career.

Join the proud people serving all across Canada and overseas. For more information, visit your nearest recruiting centre, or mail the coupon below. You can also call us collect. We're in the Yellow Pages under "Recruiting".



THE CANADIAN ARMED FORCES.

Canada

The career with a difference.

Director of Recruiting & Selection
National Defence Headquarters
Ottawa, Ontario K1A 0K2

I am interested in dental hygiene career opportunities in the Canadian Forces.

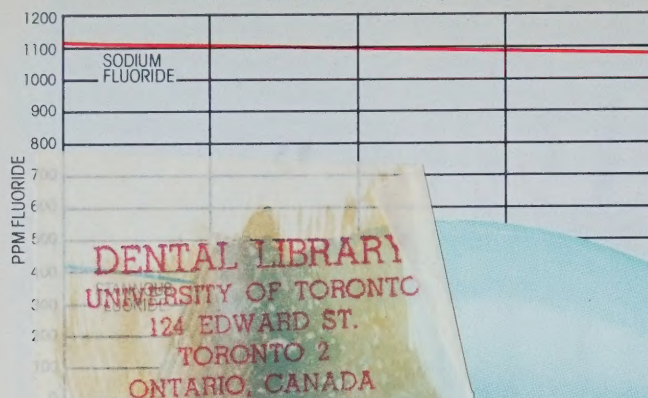
Name _____ Tel. _____

Address _____

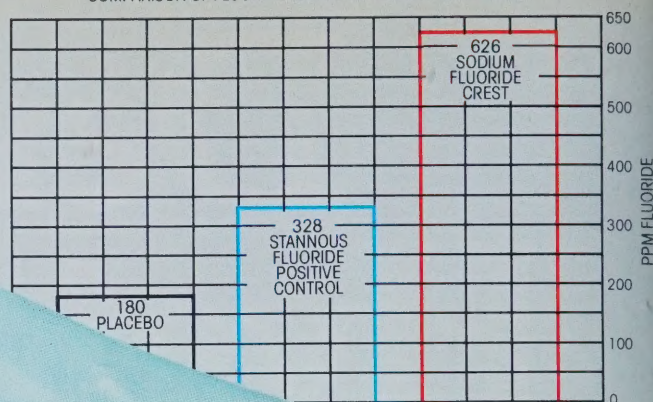
City _____ Prov. _____ Postal Code _____

There's no life like it.

AVAILABLE FLUORIDE OVER TIME (MONTHS)



COMPARISON OF FLUORIDE UPTAKE IN DECALCIFIED ENAMEL



DENTAL LIBRARY
UNIVERSITY OF TORONTO
124 EDWARD ST.
TORONTO 2
ONTARIO, CANADA

MORE FREE FLUORIDE GIVES TODAY'S CREST MORE FIGHT THAN EVER BEFORE

Even better cavity protection than previous Crest.^{1,2}

Today's Crest supplies 3 to 5 times more free fluoride to the tooth.³ More importantly, a new study by Dr. M. J. Mobley⁴ shows that this fluoride is taken up by decalcified enamel at nearly twice the level of previous Crest. It has been suggested that a high level of free fluoride in incipient carious lesions accelerates the natural remineralization process.⁵⁻⁸

This helps explain why Crest gives your patients more fight than ever before.

Even better patient compliance with a new great-tasting gel.

Crest's unique active/abrasive formula is now available in a third flavour, a translucent blue gel. It's an excellent chance for improved compliance, particularly with your younger patients! No wonder Crest still leads in good dental health for the whole family.

You've never had
better reason to recommend Crest.

Crest



Crest* contains sodium fluoride which is, in our opinion, an effective decay preventive agent, and is of significant value when used in a conscientiously applied program of oral hygiene and regular professional care.

CANADIAN DENTAL ASSOCIATION

- References:
1. W.A. Shuman, *Therm Dent*, 6:1-7, 1981.
 2. W.A. Shuman, P.S. Gish, C.W. Martin, M.E. Phelan, *Therm Dent*, 6:1-7, 1981.
 3. Data on file at Procter & Gamble Inc.
 4. Mobley, M.J.: *J Dent Res*, 60 (12):1943-1948, 1981.
 5. Arends, J., ten Cate, J.M.: *J Cryst Gro*, 53:135-147, 1981.
 6. Silverstone, L.M.: *Caries Res*, 11 (Suppl. 1):59-84, 1977.
 7. Ostrom, C.A., et al: *J Dent Res*, 56(3):212-221, 1977.
 8. Zahradnik, R.T.: *J Dent Res*, 59(6):1065-1066, 1980.



the canadian dental hygienist

l'hygieniste dentaire du canada

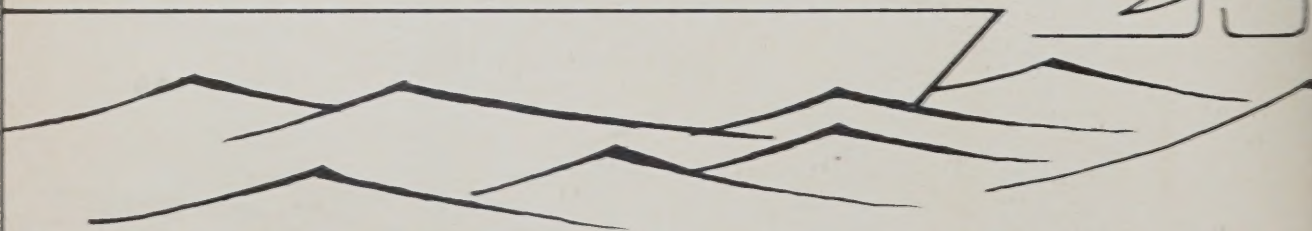
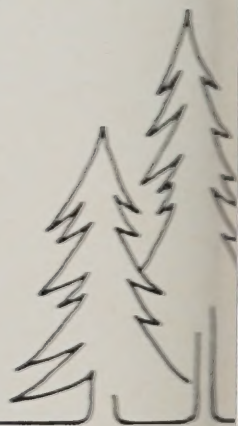
FALL 1982 AUTOMNE

VOLUME 16, NO. 3



CONFERENCE
ON THE
COAST

C.D.H.A.



VANCOUVER B.C. CANADA
SEPTEMBER 25th. - 28th. 1983

the canadian dental hygienist

l'hygieniste dentaire du canada

contents/contentu

COVER STORY

October is CFDE month. The Canadian Journal for Dental Education has been helping us for 15 years providing fellowships to train teachers for dental hygiene programs and assisting in fund-raising conferences to promote dialogue about dental auxiliary training and research in dental hygiene. Send your tax-deductible contributions to the CFDE and support the education of your colleagues. Cover photo by Pat Lobzun.

articles/articles

Membership In The Canadian Dental Hygienists' Association: The Professional Choice. Frances R. Jeffs, R.D.H., B.Sc.D 78

Educational, Demographic, Professional, And Employment Characteristics of Dental Hygienists In Canada, 1979. D.W. Lewis, D.D.S., D.D.P.H., M.Sc.D., F.R.C.D.(C) 82

features/reportage

Comment: What do you get for 20¢ a day? 70

CDHA 1982 Board Transactions 74

Self-Assessment Test 76

Alternatives: The Business Side of Dentistry. Marjorie J. Dimitri, Dip. Dent. Hyg., M.Ed. 77

CDHA Guide to Submission of Manuscripts 89

October is cfde/fced month 92

departments/sections

Newsline 71 Classified Advertising . 93

Directory 1982-83 90 Abstracts 94

staff/l'atelier

Editor/Redacteur en chef
Stephanie Nagle
2221 Victoria Avenue,
Windsor, Ontario N8X 1R2

Publisher/Editeur
Advertising Manager/
Gérant de la publicité
J.S. Woloschuk
Controlled Publications

Subscriptions Manager/
Gérant des abonnements
Controlled Publications
680 E.C. Row,
P.O. Box 1029, Station "A",
Windsor, Ontario

Advisors/Conseillers
Joan Voris, 3589 Osler Street,
Vancouver, B.C. V6H 1M3

Marjorie Dimitri
1606 Ayleslynn Drive,
Vancouver, B.C. V7J 2T3

Louise Gosemick
3078 De Lorimier,
Montreal, Quebec H2E 2P9

THE CANADIAN DENTAL HYGIENIST is the official journal of the Canadian Dental Hygienists' Association and is published quarterly.

All journal communications should be directed to the Editor, except subscription and advertising matters which should be addressed to the respective staff members.

Subscription rates for non-members are: \$15.00 per year in Canada and \$22.50 per year foreign. The opinions expressed in editorials or articles are those of the authors and do not necessarily represent the views of the Association, the Publisher or the Editor.

L'HYGIENISTE DENTAIRE DU CANADA est la revue officielle de l'Association des hygiénistes dentaires du Canada et est publiée à tous trois mois.

Toutes communications ayant trait à la revue devraient être adressées au Rédacteur en chef, à part les abonnements et tout ce qui concerne la publicité, ce qui, de leur côté, devraient être adressés aux membres du personnel respectifs.

Les tarifs d'abonnements pour les non-membres sont les suivants: \$15.00 par année au Canada et \$22.50 par année en pays étranger.

Les opinions exprimées dans les éditoriaux ou dans les articles celles des auteurs et ne représentent pas nécessairement les points de vue de l'Association, de l'Editeur or du Rédacteur.



Member Publication

Canadian Association of Dental Editors

6176/CN ISSN 008-3380

TODAY'S COLGATE: TWO FLUORIDE REMINERALIZATION

Today's Colgate was developed on the principle that if a toothpaste combines two fluorides which act differently, it may provide enhanced remineralization over a single fluoride toothpaste. We believed this would result in fewer cavities for your patients than ever before.

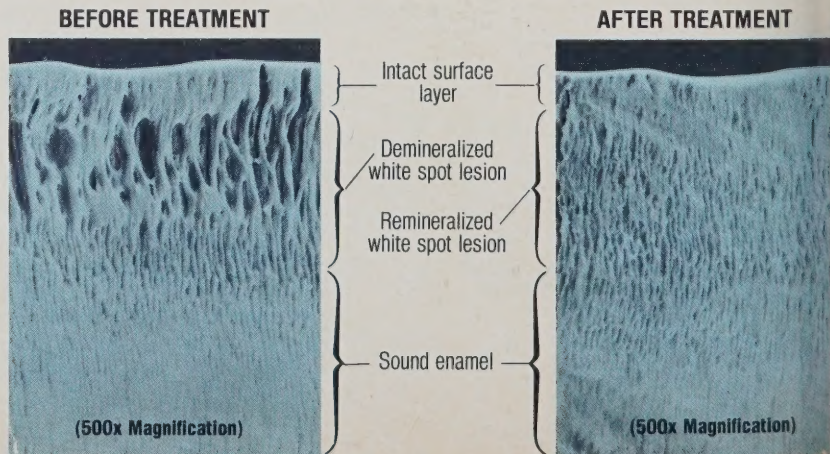
REMINERALIZATION.

Remineralization is the reversal of the demineralization process before a white spot lesion becomes a cavity (1). Studies have indicated that the presence of fluorides in demineralized enamel improves the natural remineralization process (2-5).

COLGATE'S TWO FLUORIDE STUDY.

In vitro studies (6) on demineralized enamel show that treatment with Colgate's combination of sodium monofluorophosphate and sodium

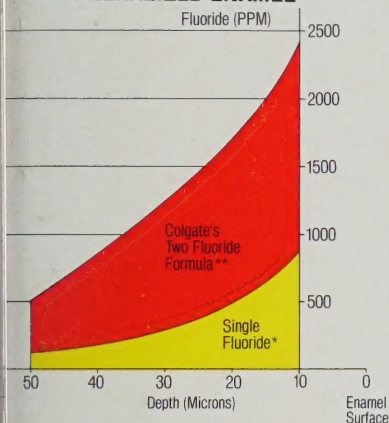
fluoride** actively promotes more complete remineralization of white spot lesions than a single fluoride formulation*. This improved remineralization of white spot lesions, we believe, ultimately leads to a greater reduction in cavities.



HOW TWO FLUORIDES REMINERALIZE MORE COMPLETELY.

Laboratory research shows that Colgate's combination of sodium monofluorophosphate at 0.76% and sodium fluoride at 0.10% delivers significantly more fluoride deeper into demineralized enamel, thus providing superior conditions for remineralization.

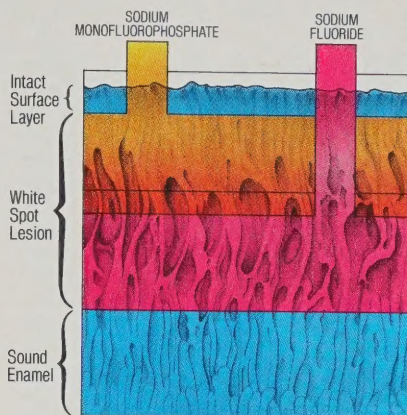
FLUORIDE UPTAKE BY DEMINERALIZED ENAMEL



Within the white spot lesion, sodium monofluorophosphate mineralizes enamel primarily at the surface while sodium fluoride penetrates deeper to remineralize sub-surface regions. This combined remineralizing action

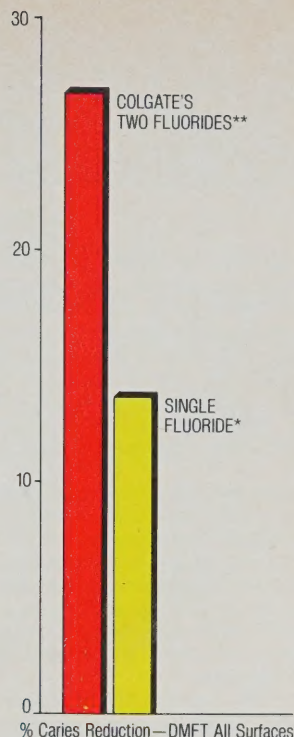
of Colgate's two fluoride formula promotes more complete remineralization of white spot lesions than a single fluoride formulation*.

REMINERALIZATION ACTION OF COLGATE'S TWO FLUORIDES



COLGATE'S CLINICAL PROOF.

The results of a three year clinical study (7) show that Colgate's combination of two fluorides provides significantly greater reduction in caries. In vitro research indicates that this results from more complete remineralization of white spot lesions before they progress to cavities.



IS THIS PART OF YOUR OHI?

We believe that Colgate's two fluoride formula is an innovation in preventive dentistry. By including Colgate in your Oral Hygiene Instruction, you will be recommending cavity protection that you can trust.

REFERENCE

1. Backer-Dirks, O., J. Dent. Res., **45**, 503-511, 1966.
2. Von Der Fehr, F.R. et al, Caries Res., **4**, 131-148, 1970.
3. Levine, R.S., Brit. Dent. J., **138**, 249-253, 1975.
4. Koulourides, T. et al, Ann. N.Y. Acad. Sci., **131**, 771-775, 1965.
5. Silverstone, L.M., Proc. Roy. Soc. Med., **65**, 906, 1972.
6. Colgate-Palmolive, Internal Studies.
7. Hodge, H.C. et al, Brit. Dent. J., **148**, 201-204, 1980.

* Sodium monofluorophosphate (0.76%)

** Sodium monofluorophosphate (0.76%) and sodium fluoride (0.10%)

† "Colgate Toothpaste contains sodium monofluorophosphate and sodium fluoride which are, in our opinion, effective decay preventive agents and are of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

Canadian Dental Association



PARTNERS IN PREVENTIVE DENTISTRY.

comment

What Do You Get For 20¢ A Day?

Professional advancement, security, and protection — how large an investment would you be prepared to make to ensure your future participation in these benefits? Only 20¢* a day will ensure you these benefits from the Canadian Dental Hygienists' Association. What can the CDHA accomplish with your 20¢-a-day membership investment?

The Canadian Dental Hygienists' Association is our national professional Association. Acting as our elected spokesmen, the executive council, committee members, and official representatives continually work toward our:

- professional advancement — "To cultivate, promote, and sustain the art and science of dental hygiene"
- security — "To maintain the honour and interests of the dental hygiene profession" and
- protection — "To represent and safeguard the common interest of the members of the dental hygiene profession and to contribute toward the improvement of the health of the public."

As conscientious health practitioners, we all strive for professional advancement. In response to our need, 30% of the total 1983 budget is allotted for: i) the official journal of the CDHA, *The Canadian Dental Hygienist/L'Hygieniste Dentaire du Canada*; ii) Continuing education through CDHA sponsored workshops, scientific sessions, convention activities, and com-

* Based on the average provincial and national membership fees.

mittee work; and iii) Professional donations to educational funds eg. CFDE. This investment ensures that all CDHA members are kept current about clinical and theoretical advancements and techniques which assist us in becoming more effective members of the dental health team.

The dismal economic plight of the nation has affected us all. Security in the workplace has become a critical priority for most hygienists. By utilizing 22% of the total 1983 budget, the CDHA has provided its members with a truly professional "security package." The Manpower and Utilization committee, CDHA Information Center, and the Statistics Canada Data Bank continue to focus on employment situations throughout Canada. By monitoring and supplying information regarding portability, federal and provincial legislation as it affects employees, employment trends, and location of placement services across Canada, CDHA members can request and be assured of correct and current employment information.

A most important and professional step was taken in 1981 to provide the profession with a distinct security — group Liability Insurance. This insurance will secure the future of every legally practising hygienist who is a CDHA member. This step will also demonstrate to the public the responsibility we accept as professionals toward their continued health.

All this . . . and more for 20¢ a day.

Under the umbrella of protecting and safeguarding the interests of CDHA mem-

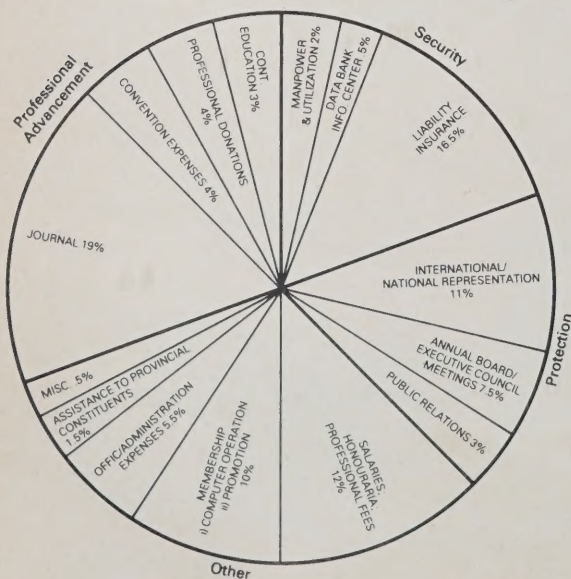
bers, the CDHA has representatives at the following national and international level: i) Canadian Dental Association Council on Education; ii) CDA Council on Health Care; iii) CSA Technical Committee on Dentistry; iv) Dental Auxiliary Liaison Officer; v) ACFD Dental Hygiene; vi) American Dental Hygienists' Association and vii) the International Liaison Representative. Profound changes and advancements affecting the entire profession and public have been made in these forums due to the effective poised representation that has been maintained by the Executive Council, committee members, official representatives, and other active CDHA members. No individual could ever expect to accomplish the same results; therefore, it should not surprise you that 21.5% of the 1983 budget has been reserved for this area.

It most certainly appears that the CDHA strives and continues to accomplish the requests and needs of our growing profession. However, this year, the CDHA will unavoidably run a deficit (see diagram). No enough hygienists are investing 20¢ a day in their professional advancement; in their security; in their protection; and in their future.

We're interested in investing in your future; are you interested in investing in you — just 20¢ a day. □

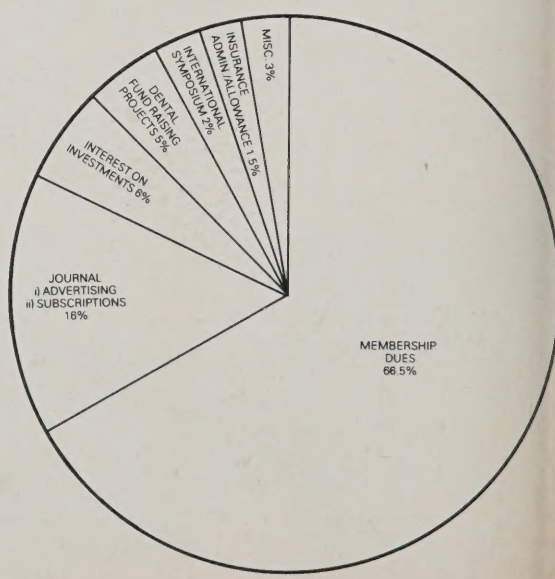
Kathleen Teresa Paly

PERCENTAGES OF TOTAL
1983 BUDGET EXPENSES



TOTAL EXPENSES \$181,467.00

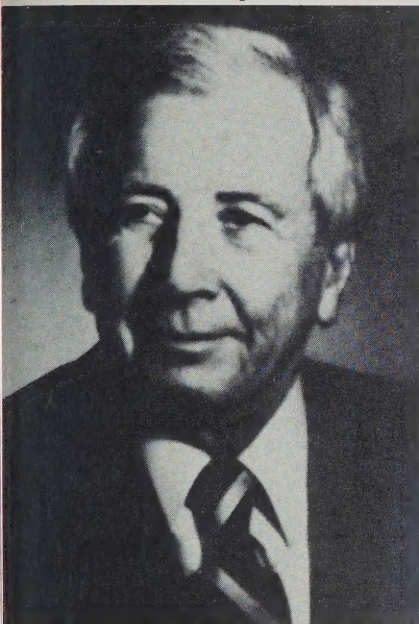
PERCENTAGES OF TOTAL
1983 BUDGET INCOME



TOTAL INCOME \$165,600.00

newsline

McDonald, CDHA's first male honorary member



Murray McDonald became the first male honorary member of the Canadian Dental Hygienists' Association during the '82 board meetings held in Toronto in May. Many hygienists have come to know McDonald over the years in his post as Executive Director of the Canadian Fund for Dental Education — a position he has held since 1967 and one from which he will retire this fall. The CFDE has been instrumental in providing funds for hygienists to continue their education beyond the diploma level.

About his appointment McDonald says, "I can assure you I am deeply touched by the honour your Association has conferred on me, particularly since it was so unexpected.

For my part, it has been a most interesting experience watching your profession develop over the past fifteen years. Your progress has been quite dramatic and undoubtedly is the result of your membership including a number of exceptionally talented leaders."

McDonald's future plans include travelling abroad and dividing his time between his home in Toronto, a cottage near Algonquin Park, and some place where it's warm and sunny during the winter.

"I also hope to spend some time searching for the ivory billed woodpecker which my bird-watching friends

assure me has been extinct for many years. A retired Imperial Oil Executive has promised to teach me how to bake bread. No doubt I'll find an opportunity to play a few rounds of golf and do some skiing, mostly cross-country. I also have to learn to fly a kite so that I can be a hero as far as my three-year-old granddaughter, Victoria, is concerned. I might even go back to school a bit, if I can find the time."

The CDHA welcomes McDonald into our organization as our third honorary member and wishes him happiness and lots of energy for his retirement plans.

CFDE fellowship recipients announced

Six dental hygienists will be awarded CFDE half fellowships of \$1,500 for the '82-'83 academic term. The recipients and their programs of study are: Eunice Edgington, B.Sc.D., University of Toronto; Marsha Gallinger, B.Sc.D., University of Toronto; Frances Cotton, M.Ed., University of Regina; Laura McCormick, B.Sc.D., University of Toronto; Janice Pimlott, M.Sc., University of Toronto; and Daniel Roberts, M.Sc., University of British Columbia.

Class of '58 holds reunion



The dental hygiene class of 1958, University of Toronto, held a Class Reunion in Toronto, May 12th to 14th, 1982. Twelve out of the 14 class members attended from as far away as Saskatchewan, Manitoba, Nova Scotia and Texas. A booklet depicting personal, family, and professional experiences since graduation was prepared and distributed prior to the reunion. This provided an opportunity to renew friendships even before meeting. Old photographs were also included.

Those attending were Alice (Andrews) Hartlan, Marg (Andris) Miller, Mary (Bolton) Armstrong, Donna (Cathro) Campbell, Carol (Chant) Carter, Betty (Douglas) Rusnyk, Pauline (Frenette) Borron, Betty (Gerhart) Rinaldo, Carolyn (Good) Roth, Phyllis (Kelly) Marshall, Pat (Prior) Johnson, and Gerri (Smart) Jeffries. Dorothy (Fulton) Margeson and Elaine (Paulson)

Woytuk were unable to attend.

The reunion was organized by Marg Miller. Activities included a dinner in the country hosted by Pat Johnson, a brunch hosted by Pauline Borron, a driving tour of Toronto courtesy of Toronto classmates, a visit to Yorkville, dinner and a night on the town, and endless conversation. The class unanimously agreed that we had not changed at all and that we were still capable of talking as we did during the two years we spent together in the dental hygiene commonroom in the old dental school on College Street.

MEMBERS Please note

From time to time the CDHA/ACHD makes its membership list available to carefully screened companies and organizations whose products, services,

Butler®

*world's most
complete line
of professional
toothbrushes*



**There's a Butler brush
for every patient's needs!**

Butler® offers more than 20 styles and sizes of toothbrushes. The soft G•U•M® line of brushes includes: Adult 3- and 4-row in nylon or natural, 3-row Youth and Child sizes in nylon, Sulcular, Travel Brush, and two new, compact Adult sizes. All have the no-nonsense straight handle... proven effective for easy manipulation!

Butler special-use brushes include: Proxabrush® system in 2 handles and 6 brush styles, Bass Right-Kind Sub-G®, Orthodontic 3-row nylon, End-Tuft in 2 trim styles, Denture Brush, Bridge & Clasp Brush, and an Interdental Brush.

Butler has a complete line of Preventive Aids, too. All are available for your patients at better drug counters everywhere. Write for catalog and professional price list.

"Your Single Source"

Butler

JOHN O. BUTLER COMPANY

9715 Cote De Liesse Rd. Dorval, Quebec, H9P1A3

or information may be of interest to you. In every case, the executive council must approve all organizations wishing to mail to members. In every case, they receive a list of names and addresses only — no other information is divulged.

Members appreciate this controlled use of our mailing list, but a few people prefer that their names not be used. We firmly respect their wishes and we address this message to them.

If you prefer to have your name removed from this mailing list, simply send your name and address (or journal label) to *The Canadian Dental Hygienist/L'Hygieniste Dentaire du Canada*, 2221 Victoria Avenue, Windsor, Ontario N8X 1R2. Please allow six to eight weeks for your request to take effect.

Educators meet in Toronto



Dental hygiene educators from Quebec CEGEP programs discuss accreditation with Dr. Doug Yeo, Chairman, CDA Council on Education.

The first Dental Hygiene Educators Seminar sponsored by CDHA was held May 9, 1982 in Toronto at CDHA/ODHA convention headquarters. The full-day agenda featured 19 speakers presenting their perspectives on two themes: strategies in Dental Hygiene Education and the Role of the CDHA in Dental Hygiene Education. The last hour provided for group discussions and submission of recommendations to the CDHA.

Sixty-two educators representing 19 dental hygiene programs attended. Most speakers were educators and CDHA members. In addition, Dr. Jean-Paul Lussier, Université de Montréal, and Dr. Doug Yeo, Chairman, CDA Council on Education presented papers.

The evaluation of the seminar indi-

CDHA — ADHA exchange greetings and ideas



North meets South at Toronto CDHA/ODHA Convention. From left are

Kathleen Smith, outgoing president of the American Dental Hygienists' Association, Patricia Grant, immediate past president of the CDHA, Linda Berry, CDHA president, and Sally West, ADHA president.

The incoming and outgoing presidents of the American and Canadian Dental Hygienists' Associations attended each other's annual meetings this year. Outgoing ADHA president, Kathleen Smith, and incoming ADHA president, Sally West, visited Toronto during the May CDHA/ODHA convention bringing greetings from their Association and establishing what is hoped to be a continual contact and exchange of ideas between the two groups.

In June, '82-'83 CDHA president, Linda Berry, represented the CDHA at the 59th annual meetings of the ADHA in Chicago. At the opening ceremonies, CDHA greetings were brought to the ADHA house of delegates, which is made up of 150 hygienists representing specific areas of each state. Unique to their meetings was a National Dental Hygiene Show featuring exhibits from over 50 dental companies. A two-day forum on research for dental hygienists was also staged at the same time as the meetings. Pat Johnson and Sharon French attended this forum on behalf of the federal government's Working Group on the Practice of Dental Hygiene. A highlight of the meetings was an address and question period by Ralph Nader, the consumer advocate. Nader put an interesting perspective on the issue of supervision of dental hygienists from the consumer's point of view.

While in Chicago, Ms. Berry visited the head office of the ADHA, which is located on the 35th floor of a modern downtown office overlooking the city, and met with Canadian-born Marjorie Sharpe, the ADHA's executive director. □

cated participants found it worthwhile, and twenty-two recommendations from the educators will be directed to the CDHA executive council for investigation or action. Some of these recommendations were that: 1) a Dental Hygiene Educators Seminar be held on an annual basis to be supported and funded by the CDHA; 2) where possible, the expertise of Canadian dental hygiene educators be tapped for seminar speakers; 3) a need exists for a faculty development workshop; 4) each seminar should adopt a central theme; 5) the CDHA should support student membership by encouraging student publications in *The Canadian Dental Hygienist*; 6) a national dental hygiene board examination for traditional dental hygiene be developed and also a method of evaluating modules; and 7) the CDHA should foster career awareness.

This seminar was organized by the CDHA Education Chairperson, Marg Miller. Linda Strevens acted as facilitator.



Linda Berry is the '82-'83 CDHA president.

The Nineteenth Annual Meeting of the Board of Directors of the Canadian Dental Hygienists' Association was called to order by the speaker, Lynn Jones. The roll was taken and the following members of the board were present:

Patricia Grant, President; Linda Berry, President Elect; Peggy Larder, Secretary; Debbie Mitton, Treasurer; Marge Bailey, Immediate Past President; Mary Pelletier, First Vice President; Winnie MacDonald, Vickie Duncanson, Alberta Directors; Diane Eade, Yvonne Smith, Sue Sumi, British Columbia Directors; Gladys Stewart, Manitoba Director; Trudy McAvity,

New Brunswick Director; Ingrid Curtis, Newfoundland Director; Lisa MacDonald, Nova Scotia Director; Judy Barnes, Linda Perron, Suzanne Leroux-Knox, Linda McCance, Carolyn Roth, Lise Thom, Fern Waldman, Ailsa Wood, Dale Scanlan, Ontario Directors; Jean MacLean, Prince Edward Island Director; and Barbara Ferris, Saskatchewan Director.

In addition the following observers were in attendance:

Stephanie Nagle, Editor; Jenny Thomas, Manpower & Utilization Chairman; Jo Gardner, Membership Chairman; Marg Miller, Education Chairman/CDA Council on Education

CDHA

Representative; Pat Johnson, Dental Hygiene Data Bank Representative; Sharon French, International Liaison Committee Representative; Dianne Bryant, Auxiliary Liaison; Anne Bosy, CSA Technical Committee on Dentistry Representative/Legislation Coordinator; Evelyn McNee, 1983 Convention Chairman; Kate MacDonald, CDA Council on Health Care Representative; Elaine Good, Sub-committee to Re-evaluate Portability; Debbie Lang, Membership Promotion Co-ordinator; Dr. G. Utas, Immediate Past President CDA; Dr. D. Williams, President CDA; Larry Peverill, Canadian Armed Forces Base Borden; Nancy Fetter, Saskatchewan; Judi Rogers, Ontario; Barb McCain, New Brunswick; Joanne Clovis, Incoming Community Dental Health Chairman; Ellen Brownstone, Manitoba; Marg Pyett, Saskatchewan; Marilyn Wilson, Ontario.

The board meeting was preceded by a Finance Meeting for those wishing to discuss the proposed budget followed by a workshop for board members, committee chairpersons, and representatives to discuss various topics which had arisen throughout the year, particularly the feasibility of incorporation and the definition of independent practice.

A Dental Hygiene Educators' Seminar was conducted by Marg Miller, CDHA Education Chairperson, and Linda Strevens. Sixty-two educators attended from across Canada.

The board of directors passed 63 resolutions during the annual meeting. The following list highlights areas of interest.

- The thrust of the membership committee's activities will be directed toward providing valid, efficient, essential services for our membership. An active membership campaign under the title "Challenge of the 80s" will commence in September 1982.
- The Association wishes to express its sincere thanks to Thora Appelt for the fine job that she has done as our executive secretary. With the resignation of Ms. Appelt due to health reasons, a search is on for a new

1982 Board Transactions

executive secretary. Applications are now being accepted for this position. (See classified ads).

- A committee has been formed to define terms relating to the employment and supervision of dental hygienists. Definitions for independent practice, indirect supervision, independent contracting, direct supervision, and general supervision will be sent to the membership for comments and suggestions before final approval.
- The incoming president, Linda Berry, will attend the meeting of the American Dental Hygienists' Association in Chicago in June 1982.
- In 1983 there will be a \$15 fee increase for active membership to offset operating expenses of the Association.
- The sub-committee on portability

has been asked to continue its efforts to improve portability for dental hygienists across Canada.

- General membership mailing labels may now be released to companies and organizations pending executive council approval.
- Continuing Education Day will be held on October 23, 1982. This day is designated for all of us to consider our need for maintaining our dental hygiene skills through participation in regionally planned activities.
- The board was concerned with the CDHA's loss of vote on the CDA's Councils of Education and Health Care, leaving us with only observer status. The CDHA executive council is to present our viewpoint on the regaining of voting status to the CDA executive.
- An ad hoc committee has been

struck to further study incorporation for the Association.

- A new category of "allied" membership has been introduced. Allied membership may be granted to individuals who are not dental hygienists or to dental hygienists who have left the practice of dental hygiene for a long term and who support and promote the objectives of the Association.
- Murray McDonald, former Executive Director of the Canadian Fund for Dental Education, was granted honorary membership in the CDHA for his support and friendship over the past 15 years.
- A budget was approved for May '82 to Sept. '83 with total anticipated expenses estimated as \$181,467 and total anticipated income estimated at \$165,600. □



It was a productive year for the '81-'82 executive council from Eastern Canada. From left are Lisa MacDonald, Nova Scotia director, Debbie Mitton, outgoing treasurer, Patricia Grant, immediate past president, and Peggy Larder, outgoing secretary.



All those in favour — 63 resolutions were passed by the board of directors.

self assessment test

Radiography

1. The National Bureau of Standards Committee on Radiation Protection specifies the tolerance dose for people who work near radiation not to exceed:
 - a) 1 rem in a year
 - b) 3 rem in a year
 - c) 5 rem in a year
 - d) 8 rem in a year
 - e) 10 rem in a year
2. An effective means of reducing the radiation dose includes:
 - i) adequate collimation
 - ii) proper filtration
 - iii) fast film
 - iv) optimum developing
 - v) careful technique

SELECT YOUR ANSWER FROM THE FOLLOWING:

 - a) all of above
 - b) i, ii and iii
 - c) iii, v
 - d) iii, iv and v
 - e) v only
3. The recommended diameter of the x-ray beam is:
 - a) 3.25 inches
 - b) 2.75 inches
 - c) 2.25 inches
 - d) 2.00 inches
 - e) none of above
4. When you use the paralleling technique, there is:
 - i) less scatter radiation
 - ii) a more accurate image
 - iii) less image distortion
 - iv) a shorter exposure time
 - v) no need to use a lead apron as there is no scatter radiation

SELECT YOUR ANSWER FROM THE FOLLOWING:

 - a) i, iii and iv
 - b) ii, iii and v
 - c) i, ii and iii
 - d) iii, iv and v
 - e) i, ii and v
5. A clinical carious lesion is actually about:
 - a) 20% larger than its radiographic image
 - b) twice as large as its radiographic image
 - c) 10% smaller than its radiographic image
 - d) the same size as its radiographic image
6. A processed film reveals some small circular shaped white spots indicating incomplete development. The error on the film during processing was caused by:
 - a) exposure to visible light and incomplete fixing
 - b) films not agitated in developer and trapped air bubbles on film
 - c) incomplete fixing and films not agitated in developer
 - d) exposure to visible light and trapped air bubbles on film
7. Which of the following tissues are most affected by ionizing radiation?
 - a) nerve tissue and adult bone
 - b) reproductive cells and blood-forming cells
 - c) skin and muscle tissue
 - d) glandular tissue and alimentary epithelium
8. You have mounted a full-mouth series of radiographs using the buccal method of mounting. The maxillary molar films on the left side of the mount were cone cut on the distal half of the film. Which of the following corrections in technique should be made on a retake of this film?
 - a) move the film mesially, and move the tube head mesially
 - b) move the tube head mesially, and, move the film distally
 - c) move the tube head distally, and direct the central ray toward the centre of the film
 - d) move the film distally, and direct the central ray toward the centre of the film
9. Radiographic foreshortening of tooth structure is caused by:
 - a) excessive vertical angulation
 - b) excessive horizontal angulation
 - c) insufficient vertical angulation
 - d) insufficient horizontal angulation
10. An advantage of a panorex radiograph over periapicals is that it:
 - a) provides a reduction in definition
 - b) provides additional information
 - c) shows more overlapping
 - d) requires a longer developing time

Yvette Mothersole
Teaching Master
George Brown College

Answers to Self-Assessment Test:

1. c 2. a 3. b 4. c 5. a
6. b 7. b 8. c 9. a 10. b

alternatives

The Business Side Of Dentistry

Marjorie J. Dimitri, Dip. Dent. Hyg., M.Ed.

For the past two years, my career as a dental hygienist has been in a non-traditional role, that of professional sales representative and consultant for Mardan Business Systems Limited. Mardan is a progressive Canadian company that has, for almost two decades, specialized in the development and marketing of products and services specifically for effective office management in dentistry and many of the other health professions. This is an area that has often been inadequate or overlooked, but which is now demanding and receiving attention due to the challenges of practising in the 80's.

Since graduating from the University of Alberta in 1967, I have been involved in a number of different roles as a dental hygienist including public health, private practice, and for many years, dental hygiene education at the University of British Columbia. While completing my Master of Education degree in Adult Education Administration at Western Washington University, I became interested in business administration and, in particular, small business and practice management. Throughout my career, I have been an active member of the dental hygiene associations on both the provincial and national levels, and have been awarded life membership in the Canadian and the British Columbia Dental Hygienists' Association. Currently, I serve as the standing officer on CDHA organization and procedures, member of the editorial advisory board, and chairman of a special committee for the development of association position statements. This affiliation with organized dental hygiene has given me a further avenue to develop

and practise my administrative and communication skills.

In 1980, I took a leave of absence from my teaching position in order to explore the alternatives available to dental hygienists in the business area, and became involved in my current role as professional sales representative and consultant for Mardan Business Systems Limited.

Professional sales, as compared to retail sales, involves the active investigation of clients' individual situations to determine their specific needs and to make recommendations as to how those needs can be met on a continuing basis with re-evaluation being a significant part of the total process. It is much like doing an examination or assessment, making recommendations for treatment, providing the services required, and performing a follow-up evaluation. Effective organizational, communication and writing skills, the ability to meet and work with people, a thorough knowledge of small business management, and flexibility are important attributes for a hygienist considering this alternative. In addition, self-discipline and the ability to plan one's schedule are most desirable.

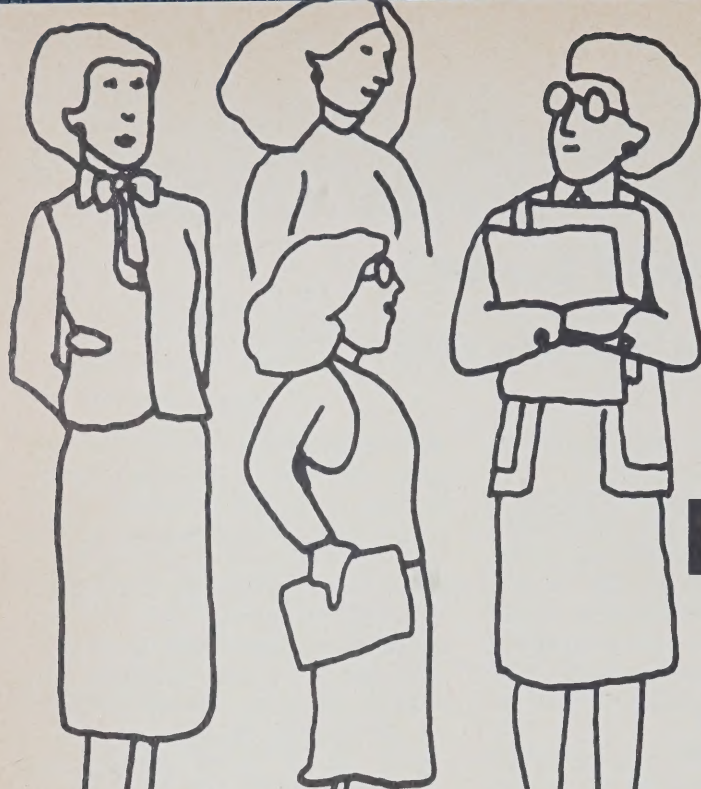
On a day-to-day basis, my responsibilities and activities are very diversified and provide continuing opportunities for application of all my dental, educational, administrative, and communication skills. Basically, they can be divided into two groups: client-related and company-related responsibilities. In the first, I represent Mardan to current and potential clients and then serve as a helpful liaison on an on-going basis. Some specific activities are product and service demonstrations,

order processing, in-office installations and training programs, consulting, problem-solving, and guest lecturing at teaching institutions and for professional groups. Company-related activities include service programs, instructional materials development, product evaluation and development, and branch office administration. Plans for the future include the development of a seminar/workshop series, "Training for the 80's", for those working in professional offices.

Another integral aspect of this position is participation in continuing education in both dentistry and practice management. In particular, courses in accounting, small business management, time management, collections, business systems and equipment including computers, communications, and human dynamics are essential.

A non-traditional career in sales offers unlimited opportunity for professional and personal growth; however, risk-taking is closely related to opportunity. In sales, you are held accountable for your individual contribution with compensation being based on productivity. You are directly responsible for the clients' satisfaction or dissatisfaction, and you often trade security for opportunity, a guaranteed salary for variable income, and regular working hours for a flexible and often-times demanding schedule.

In summary, professional sales is a challenging and rewarding career, and is an ideal alternative for self-directed and service-oriented individuals. *YOU* are responsible for *YOU*, and your success is dependent upon your desire to reach a goal. □



Membership in Dental Hygienists' Association The Professionals

Frances R. Jones

DENTAL HYGIENIST — s/he scrapes the gook off of your teeth that you should have kept clean yourself¹

At one time or another we have all probably been referred to as the 'cleaning lady' or the 'girl who cleans your teeth'. Usually this is said in a light tone and we accept it as such; but as professional hygienists, are we really only interested in 'scraping teeth'? Of course not. We are very much concerned with the total health of our patients, and we should be just as concerned with the total health of our chosen profession.

This is the 1980's and dental hygiene has been practised in Canada for over 30 years. In that time we have gone from a relatively obscure beginning to a mature, developing profession. To date, there are over 4,000 dental hygienists licensed to practise in Canada with 23 schools offering dental hygiene at the two-year diploma/certificate level. The University of Toronto offers a post certificate baccalaureate program and the University of Montreal has a 30-hour post certificate program designed for C.E.G.E.P. graduates who wish to qualify for a baccalaureate program. Other baccalaureate programs are in the planning stage. Canada does not yet offer a Master's program in dental hygiene.

The majority of hygienists live in Ontario and Quebec (Table 1) with approximately 97% being female. Most hygienists are employed in a form of private practice.²

It is clear that, in a geographically vast land such as ours, we as a profession require a strong national voice. The Canadian Dental Hygienists' Association (CDHA) was formed in 1964 when we were fewer than 300 in number. Less than 20 years ago our colleagues envisioned a real need to act as a cohesive unit. Is it any different today?

**TABLE I
NUMBER OF DENTAL HYGIENISTS
BY PROVINCE IN CANADA 1981**

Province	N	%
Ontario	1708	40.3
Quebec	1106	27.3
British Columbia	479	11.3
Alberta	368	8.7
Manitoba	203	4.8
Nova Scotia	186	4.4
Saskatchewan	51	1.2
New Brunswick	38	.9
Prince Edward Island	24	.6
Newfoundland	20	.5
Canada	4237	100.0



ne Canadian ' Association: nal Choice

H., B.Sc.D.

There are many issues of prime importance that can only be dealt with in a collective manner. Among these are provincial supervision laws, licensure, accreditation standards, quality assurance, and alternate systems of health care delivery. These are all very crucial and topical issues to the "grassroots hygienist", though they may not be perceived to be. All hygienists, CDHA members or not, benefit from the efforts made by the Association. Doesn't this effort deserve our support?

The Lewis Report² (1979) stated that 67% of the hygienists surveyed in Canada were members of CDHA, while 1981³ figures indicate that membership had dropped to 47%. What caused this decrease? The two reasons given most frequently by practising hygienists, in 1979, were "not interested" (21.6%) and "no value seen in the association" (26.0%). Those who were not employed as hygienists indicated "not practising" as their reason for not belonging.² All provincial dental hygiene associations are constituent members of the CDHA. In Quebec and Prince Edward Island, one may opt to belong to both or only to the provincial or national association, and, in these provinces, provincial membership is more frequent than national membership. In 1981³ only 5% of Quebec's hygienists were involved at the national level. One can only speculate as to the reason. According to the 1979 data² only 3.4% of employ-



ed hygienists who responded to the survey, noted "not bilingual" as a reason. Did only the English-speaking hygienists reply or is language not a significant factor? It is interesting to note that Quebec also had the lowest response rate (73.11%) of all the provinces.

Several pages of the Fall '81 issue of the CDHA Journal were devoted to the promotion of membership.⁴ This journal was sent to every hygienist in Canada. Sections were submitted from across the country and pointed out the benefits of belonging to the Association. These pleas were primarily intended to reach the hygienist who was due to renew membership, rather than the non-member. Many issues sent to Quebec hygienists were returned address unknown. Did the readers even notice the special section on membership? Was it read with interest? Only time will tell.

The American Dental Hygienists' Association (ADHA) is also wrestling with the problems of membership. A survey of California hygienists in 1978⁵ indicated that 67% were ADHA members; non-members felt that their association was not meeting the needs of the private practice hygienist. The ADHA, founded in 1923, has represented American hygienists for nearly 80 years. Today, the ADHA is very much involved in maintaining high practice standards, monitoring proposed legislation and regulations, expanding the scope of dental hygiene practice, maintaining a liaison with federal health agencies, and assisting constituents so that

they can gain representation on State Examining Boards. Since 1974, 34 Boards have included dental hygienists. ADHA provides the communication network for hygienists across the United States.⁶

In 1980, the ADHA put forth a position statement that clearly implied that "the dental hygienist's quality of care in delivery of health service is not dependent upon the review of a dentist."⁷ The American Dental Association (ADA) reacted to this statement by planning a special membership category for hygienists which will encompass scientific sessions at the ADA annual meetings especially for hygienists and by announcing its intention to appoint a "dentist committee to investigate the concerns of dental hygiene."⁷ The ADHA sees this as an attempt to draw members away from ADHA, rather than as a mechanism to provide protection and services for those hygienists whose views are not consistent with ADHA policy statements. There is a concern that the "grass-roots hygienist" may opt for the ADA plan, rather than work together with their peers in ADHA.

The events occurring in the U.S.A. could conceivably happen in Canada. We are a much smaller association, but we are facing many of the same problems. The brief presented by CDHA to the Health Sciences Commission in April 1980 contained 14 recommendations concerned with achieving optimum levels of dental health for all Canadians. These recommenda-

tions included legislation and regulation supervision, quality assurance, education, and alternate practice settings. The Canadian Dental Association (CDA) did not receive all of the recommendations kindly. They subsequently passed a resolution at the Board of Governors meeting in August 1981 excluding auxiliaries from membership on the CDA Councils of Health Care and Education, explaining that their constitution does not permit non-CDA active members voting privileges on their councils. At this time, auxiliaries are permitted to sit on these two councils as non-voting members; the voting privilege they were given in 1979 having been rescinded. Efforts are currently being made by CDHA to improve relations with CDA.

The most controversial issue of our time is supervision. Provincial regulations vary. Functions and duties legally performed by dental hygienists range from traditional to progressive depending on the province.⁹ Hygienists are now involved in both the primary and secondary aspects of prevention. Concern over supervision ultimately leads to the concept of independent practice. This concept, included in the CDHA Brief, was the most controversial aspect of that paper. Many hygienists want more information on alternate practice settings, while others feel threatened by a less traditional role. Where you stand is your individual preference. There is validity to both points of view.

As noted previously, there is concern that ADHA and CDHA are not meeting the needs of the private practice hygienist. But are these hygienists communicating their needs to the association in question? Those who do not agree with association policy should and must make their concerns known. Conversely, those in support must not sit back idly. No one individual has the right to impede the progress of others, but they do have the right and obligation to contribute to the profession as a whole. Boycotting the Association does not achieve anything, but a member with a dissenting voice does. Involvement at the local, provincial, or national level provides the opportunity to influence the activities and goals of our Association. As the issues facing the profession become more and more complex, CDHA needs the full support of every hygienist in Canada.

As you read this article, think of why you joined CDHA. What can you do to convince your peers to join? TABLE II indicates the pe-



In 1981, there were 1106 hygienists in Quebec representing 27.3% of the total hygiene population in Canada. Only 5% of them chose to belong to the CDHA. Is CDHA not meeting the needs of Quebec hygienists?

centage of CDHA membership per province in 1981. It is hoped that the 1982 figures will be more encouraging.

TABLE II

PERCENTAGE OF CDHA MEMBERSHIP PER PROVINCE IN 1981

	Members		Non-Members		Total
	N	%	N	%	N
British Columbia	351	73.3	128	26.7	479
Alberta	266	72.3	102	27.7	368
Saskatchewan	41	80.4	10	19.6	51
Manitoba	110	54.2	93	45.8	203
Ontario	1012	59.2	696	40.8	1708
Quebec	60	5.2	1110	94.8	1160
New Brunswick	31	81.6	7	18.4	38
Nova Scotia	83	44.6	103	55.4	186
P.E.I.	12	50.0	12	50.0	24
Newfoundland	15	75.0	5	25.0	20
CANADA	1981	46.8	2256	53.2	4237

Some provinces, notably the ones with few hygienists, are close to total membership. Perhaps these hygienists feel the need for a strong, cohesive voice due to their relative isolation. As of January 1981, Saskatchewan's licence and Association fees are tied together to cover the cost of the now mandatory continuing education. This means 100% membership for those who are practising. Yet, the small province of P.E.I. has only 50% membership. What is the reason? Is it perceived that the larger provinces are controlling the Association? True, the majority of directors come from Ontario, but so does 51% of the members. When directors attend national meetings they are not tied into specific provincial policies but are charged with making decisions for all Canadian hygienists.¹⁰ The geographical distribution of directors can be seen in TABLE III.

Do hygienists who choose not to join think that CDHA is simply a journal four times a year and a convention at the end of the summer? Do they feel that the Association is not doing enough for them? If they would read their provincial newsletters as well as the journal, they would understand the complexity of the tasks being enacted on their behalf.

TABLE III

GEOGRAPHICAL DISTRIBUTION OF CDHA

	Directors
British Columbia	3
Alberta	2
Saskatchewan	1
Manitoba	1
Ontario	10
Quebec	1
New Brunswick	1
Nova Scotia	1
P.E.I.	1
Newfoundland	1

What should we do? How do we combat apathy? Perhaps we should start in the colleges and universities when the students are keen and eager. We need to develop the concept and pride of professionalism that dental hygiene deserves, if it is to become more than just 'scraping teeth' in a windowless operatory. Learning and sharing does not end when the diploma is hung on the wall; it just begins.

SUPPORT THE CDHA, IT SUPPORTS YOU! □

References

1. Consumers Dental Bible, Project P., Inc. Geo. Banta Company, Wisconsin 5th edition, 1978.
2. Lewis, D.W., Pierce, M.H., Caisjo, K. and Andrews, P.I. Demographic and Employment Profile of Dental Hygienists in Canada 1979. Research Report #40, Dental Manpower Report #12, University of Toronto, March 1981.
3. Canadian Dental Hygienists' Association — 1981 Canadian Dental Hygienists by Province and National Association Membership.
4. Canadian Dental Hygienist 15(3): 59-62, 1981.
5. Owens, B.A. and Martinoff, J.T.: Profile of a Dental Hygienist. Dental Hygiene 59:9, 1978.
6. Serviceline: Dental Hygiene 55(5): 14, 1981.
7. Woodall, I., R.D.H. 1: 10, 1981.
8. Canadian Dental Association Journal 48(2): 83, 1982.
9. Canadian Dental Hygienist 15(2): 33-38, 1981.
10. Procedures Manual of the CDHA, August 1981.

About the author: Fran Jeffs is an '82 graduate of the U of T B.Sc.D. program and she will be continuing her education this fall in a part-time M.Ed. program at the University of Regina. Ms. Jeffs will also function as supervisor of the dental hygiene program at the Wascana Institute for the '82 - '83 academic term.

Educational, Demographic, Professional, and Employment Characteristics of Dental Hygienists in Canada, 1979

D.W. Lewis, D.D.S., D.D.P.H., M.Sc.D., F.R.C.D.(C)

As part of a large dental manpower study, the current state of dental hygiene in Canada was assessed by circulating a mail questionnaire late in 1979 to all dental hygienists residing in or registered to practise in Canada. Completed questionnaires were returned by 2,792 dental hygienists resulting in a response rate of 84.0%. Because the sampling frame used was not limited to provincially licensed hygienists or to those working actively as dental hygienists, it was felt that this high response (nationally and from each province) was very representative of the state of dental hygiene at that time. However, it must be pointed out that other cross-sectional national surveys, notably the Statistics Canada Data Bank on

dental hygienists — 1976, 1977, 1978 and 1979, have achieved similarly high response rates using an equally broad sampling frame. They, as well, have the advantage of allowing year-to-year comparisons. What makes the 1979 survey findings being presented here and particularly in later articles, perhaps unique is the scope or breadth of the questions asked combined with the high response mentioned above.

Questionnaire Development

The questions were developed by the staff of the Dental Health Care Services Research Unit of the Faculty of Dentistry, University of Toronto with the assistance of the

Canadian and Ontario Dental Hygienists' associations. Information was requested in two major areas: demographic and related characteristics; and current workplace characteristics.

Included under the demographic section, completed by all respondents, were questions on place of residence, age, sex, marital status, educational background, licensing history, professional activities and past work history. The respondents were also asked to indicate their current employment status — employed as a dental hygienist, employed but not directly in dental hygiene, or unemployed. For those either not working in dental hygiene or unemployed, data were requested on their past dental hygiene employment history and their future employment plans in the field in order to assess their potential future role in providing dental care services.

It is only some of the findings from this first section that are the subject matter of the present article.

Those currently employed as dental hygienists were asked to fill out additional survey forms for each separate workplace indicating the workplace location, type of dental hygiene employment, their work schedule, and rate of compensation and benefits accrued at each place of employment. Of those treating patients, information was gathered on the relative amount of time involved in the different types of dental hygiene duties, additional personnel employed at the office, and workplace conditions.

The findings on each dental hygiene workplace from this second section of the questionnaire will be described in later papers in this series.

Space limitations — and one must admit, threshold levels of boredom for the general reader — do not allow printing of the immense amount of data analyzed. For particularly interested readers, a limited number of copies of much more detailed reports concerning this survey that included numerous tables are available directly from the author. In many instances, these tables give the findings from each province. Pro-

vincial differences will not be heavily emphasized in this series of articles. Here, for the reasons just mentioned, dental hygiene in Canada is described in a necessarily summary or overview fashion.

Educational, Demographic and Professional Profile

(1) Education

Of the 2,792 hygienists in Canada who responded to the survey, 35% were dental assistants before becoming hygienists, although the provincial variations ranged from a low of 10% in Prince Edward Island to a high of 52% in Ontario. The majority who had been dental assistants had been formally trained for this work.

Ninety-four per cent had received their dental hygiene training in Canada for which the vast majority (96.5%) had received diplomas. The province of graduation was closely related to their current workplace or residence location. Most of the dental hygienists (59%) had graduated in the last five years. Their current activity status was closely related to the year of their graduation as hygienists, with the percent who remained active in dental hygiene (part- or full-time) generally declining as the number of years since graduation increased. Thus, although 96% of the 1979 graduates were working as dental hygienists, about 80%, 66% and 55% of 1975, 1970 and 1965 graduates, respectively, were so working. However, the percent active in dental hygiene at the time of the survey rose to about 60% to 66% with those graduating before 1965.

Although 33% of all responding dental hygienists had been trained in expanded duties, there were large provincial variations in both the relative numbers trained and the type of expanded function training received.

Forty-one percent of hygienists had received additional post-secondary training beyond their initial dental hygiene course. Seventy-two percent of this additional

training was solely in a field other than dental hygiene (usually university arts and science courses). The perceived usefulness of these additional courses depended on the specific type of course considered.

Continuing education courses in dental hygiene had been taken by 80% of the practising hygienists with the average number of courses taken in the last two years being 3.8. However, the exact length and nature of these courses was not determined.

(2) Demographic Characteristics

As expected, the vast majority (97.2%) of dental hygiene respondents were female. Eighty-nine percent of all hygienists were born in Canada. The province of residence of the respondent at the time of the survey was closely related to the birthplace province, except for Newfoundland and British Columbia, since just 37% of the dental hygienists residing in each of these two provinces were born there.

The average age of all respondents was 30.1 years; each province, except Quebec (25 years) and Prince Edward Island (37 years), was close to this national average. The average age of the hygienists actively working in dental hygiene was nearly four years lower than that of the non-active hygienists.

Sixty percent of the hygiene respondents were married; three-quarters of the married and 94% of the single respondents were actively employed as dental hygienists. Twenty-one percent of the married respondents and 4.3% of the single respondents were not employed.

Forty-eight percent of married hygienists had dependent children at home. Sixty percent of these hygienists were still directly active in dental hygiene whereas about 93% of those without dependent children were active. The presence of dependent children was definitely associated with the amount of time those who worked in dental hygiene devoted to dental hygiene practice since, for example, those without dependent children worked 34.2 hours per week, on average, and those with dependent children

worked 25.6 hours per week. Hygienists with dependent children under age five worked less than those with dependent children between ages five and 14 years.

(3) Professional Activities

In 1979, 67% of all responding hygienists belonged to the Canadian Dental Hygienists' Association and 73% were members of their provincial associations. Membership in professional association was related to activity status; 78.8% of those currently active in dental hygiene belonged to their provincial associations and 71.0% to the C.D.H.A. The main reason cited for not belonging to the association included: no value seen in the association; lack of interest; and financial problems.

(4) Licensure History

Most dental hygienists at the time of the survey were currently licensed to practise in Canada with 99.1% of currently practising hygienists, 76.9% of hygienists working in another field and 84.6% of unemployed hygienists being licensed to practise. For these latter two groups who were not working directly in dental hygiene, the percentage licensed represented 400 hygienists who could be considered as potential future sources of dental hygiene services should they wish to return.

The amount of time that had elapsed since licensure for those who were not currently licensed was short, 2.5 years, on average, with 37.3% having not been licensed for one year or less.

Employment Profile

(1) Employment History

Of the 2,792 dental hygienists residing in Canada who responded to the questionnaire, 82% were currently working in dental hygiene, 3% were working in another field and about 14% were not currently employed (Table 1).

TABLE 1

ACTIVITY STATUS OF CANADIAN DENTAL HYGIENISTS
BY PROVINCE OF WORKPLACE/RESIDENCE

Province	Activity Status							
	Employed in Dental Hygiene		Employed in Other Field		Unemployed		Total	
	n	%	n	%	n	%	n	%
CANADA	2301	82.4	91	3.3	400	14.3	2792	100.0
Newfoundland	12	75.0	1	6.3	3	18.7	16	100.0
Prince Edward Island	13	65.0	1	5.0	6	30.0	20	100.0
Nova Scotia	80	82.4	3	3.4	14	14.4	97	100.0
New Brunswick	34	91.9	-	-	3	8.1	37	100.0
Quebec	376	84.5	20	4.5	49	11.0	445	100.0
Ontario	1124	85.1	35	2.6	162	12.3	1321	100.0
Manitoba	106	77.4	5	3.6	26	19.0	137	100.0
Saskatchewan	35	70.0	6	12.0	9	18.0	50	100.0
Alberta	252	79.2	10	3.1	56	17.7	318	100.0
British Columbia	267	76.9	9	2.6	71	20.5	347	100.0
Yukon & N.W.T.	2	50.0	1	25.0	1	25.0	4	100.0

Thirty-four percent of all responding hygienists had been continuously employed full- or part-time in dental hygiene from their graduation date until December 1979. And an even more surprising statistic is that all respondents had worked as dental hygienists on a full- or part-time basis for 87% of the total potential amount of time available for work since their graduation. About 94% had been employed as dental hygienists 50% or more of their total potential time for employment since graduation. The figures, of course, differed according to the current employment

status of the hygienists, with those currently employed as hygienists having had a higher percentage of continuous employment since graduation (41%) and a higher average of potential amount of time worked (a mean of 91%). Of the hygienists not working in dental hygiene in 1979, 55.8% had been inactive for one year or less. Only 20% had been out of the dental workforce five years or more.

Fifty-seven percent of active Canadian dental hygienists had not changed jobs in the last three years; nearly 23% had changed jobs once and 12% had changed twice (Table 2).

TABLE 2

NUMBER OF JOB CHANGES IN LAST THREE YEARS BY WORKPLACE/PROVINCE -- EMPLOYED DENTAL HYGIENISTS

Province	Number of Job Changes											
	None		One		Two		Three		Four		Five	
	n	%	n	%	n	%	n	%	n	%	n	%
CANADA	1282	56.7	518	22.9	274	12.1	137	6.1	31	1.4	12	0.5
Newfoundland	3	27.3	5	45.5	2	18.2	1	9.1	-	-	-	-
Prince Edward Island	9	69.2	4	30.8	-	-	-	-	-	-	-	-
Nova Scotia	56	70.0	13	16.3	9	11.3	2	2.5	-	-	-	-
New Brunswick	26	76.5	5	14.7	1	2.9	1	2.9	1	2.9	-	-
Quebec	231	62.1	58	15.6	58	15.6	17	4.6	6	1.6	2	0.5
Ontario	645	58.6	245	22.3	121	11.0	68	6.2	11	1.0	7	0.6
Manitoba	50	47.2	36	34.0	15	14.2	4	3.8	1	0.9	-	-
Saskatchewan	17	51.5	8	24.2	6	18.2	2	6.1	-	-	-	-
Alberta	125	50.6	71	28.7	27	10.9	17	6.9	5	2.0	1	0.4
British Columbia	120	45.5	72	27.3	35	13.3	24	9.1	7	2.7	2	0.8
Yukon & N.W.T.	-	-	1	50.0	-	-	1	50.0	-	-	-	-

Nearly 9% had taken jobs as dental assistants since graduating as dental hygienists. The most common reason (44%) given for taking a dental assistant job was that it was part of the dental hygiene job requirement; however, nearly one-quarter (23%) of the 187 active hygienists who had taken dental assistant jobs at one time did so because no dental hygiene jobs were available.

(2) Current Work Status

Of the respondents employed in a field other than dental hygiene, 36% were working in some capacity in the dental field (dental receptionist, consultant, assistant, etc.). Unemployed hygienists had, in general, left the workforce temporarily with only about 15% stating that they felt they were permanently out of the dental hygiene workforce.

Seventy-one percent of employed hygienists in 1979 had been unemployed less than one month before they found their current dental hygiene job(s). About 69% found positions in the community in which they lived.

Most (81.5%) worked in one dental hygiene position; the mean number of positions per hygienist was 1.2 (Table 3). They worked 4.3 days and 31.2 hours per week, on average. Nearly one-half (49%) worked full-time (over 34 hours per week). In Canada as a whole and in several of the provinces, the mean number of hours worked per week declined with increasing age then rose after about age 40 (Table 4). However, even in the age group that displayed the lowest mean hours worked per week, 35-39 years, the mean was 26.2 hours indicating about three and one-half days of work per week (Table 4).

TABLE 3

NUMBER OF DENTAL HYGIENE WORKPLACES BY PROVINCE OF WORKPLACE - ACTIVE DENTAL HYGIENISTS

Number of Workplaces											Total No. Work- places	Mean Work- place
Workplace Province	<u>1</u>		<u>2</u>		<u>3</u>		<u>4</u>		<u>5</u>			
	n	%	n	%	n	%	n	%	n	%		
CANADA	1876	81.5	390	16.9	33	1.4	1	0.1	1	0.1	2764	1.20
Newfoundland	11	91.7	1	8.3	-	-	-	-	-	-	13	1.08
Prince Edward Island	12	92.3	1	7.7	-	-	-	-	-	-	14	1.08
Nova Scotia	68	85.0	12	15.0	-	-	-	-	-	-	92	1.15
New Brunswick	29	85.3	3	8.8	1	2.9	-	-	1	2.9	43	1.26
Quebec	357	94.9	18	4.8	1	0.3	-	-	-	-	396	1.05
Ontario	844	75.1	259	23.0	20	1.8	1	0.1	-	-	1426	1.27
Manitoba	96	90.6	10	9.4	-	-	-	-	-	-	116	1.09
Saskatchewan	33	94.3	2	5.7	-	-	-	-	-	-	37	1.06
Alberta	218	86.5	33	13.1	1	0.4	-	-	-	-	287	1.14
British Columbia	206	77.2	51	19.1	10	3.7	-	-	-	-	338	1.27
Yukon & N.W.T.	2	100.0	-	-	-	-	-	-	-	-	2	1.00

TABLE 4

AVERAGE HOURS WORKED PER WEEK IN DENTAL HYGIENE
BY AGE AND PROVINCE OF WORKPLACE

Province	Age Categories							
	Under 25	25-29	30-34	35-39	40-44	45-49	50+	All
	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$
CANADA	33.9 (1013)*	32.1 (747)	28.0 (307)	26.2 (142)	27.0 (37)	32.2 (24)	28.1 (17)	31.2 (2292)
Newfoundland	23.5	28.5	-	-	12.0	-	-	26.4
Prince Edward Island	41.3	37.4	25.5	-	35.0	-	-	36.3
Nova Scotia	36.1	34.0	34.6	-	27.5	38.3	42.7	35.3
New Brunswick	35.4	35.1	22.8	37.0	18.0	40.0	15.0	33.0
Quebec	32.0	32.9	30.1	20.0	-	24.0	16.0	32.0
Ontario	34.2	31.0	24.6	24.3	23.8	25.4	29.8	30.7
Manitoba	35.8	31.8	34.1	-	40.0	50.0	-	34.5
Saskatchewan	33.4	30.9	29.5	-	-	35.0	-	31.0
Alberta	34.3	29.3	24.9	23.7	29.0	35.0	30.0	30.8
British Columbia	33.0	30.2	26.1	26.0	30.3	10.0	35.0	29.7
Yukon & N.W.T.	-	-	27.5	-	-	-	-	27.5

*The numbers in brackets are the total sample size in each age group.

(3) Future Dental Hygiene Work Plans

Thirteen percent (59) of non-active hygienists were currently seeking work in dental hygiene at the time of the survey; they had spent an average of 4.8 months seeking a position. A large percentage (43.2%) of non-active hygienists were unsure of their future work plans.

Seventy-one percent of currently employed hygienists planned to continue a career in dental hygiene. Future work plans were not associated with age, marital status, or presence of dependent children, but were strongly associated to satisfaction with dental hygiene career. Ninety-one percent of active dental hygienists do not have any retirement plans as yet.

(4) Career Satisfaction

Overall, 48.4% of the respondents who were employed as dental hygienists in 1979 were very satisfied with their careers, 38.2% were somewhat satisfied, 11.2% were somewhat dissatisfied and 2.3% were very dissatisfied. Dissatisfaction (somewhat and very dissatisfied) was lowest in New Brunswick (6.0%), followed by Prince Edward Island (9.1%) and Ontario (9.8%). Dissatisfaction was highest in Quebec (18.9%) followed closely by British Columbia (18.6%). Dissatis-

faction was nearly 13% in Saskatchewan and ranged from about 15% to 16% in Newfoundland, Nova Scotia, Manitoba and Alberta.

Discussion

The points worthy of discussion here will be limited to some of those findings that either appear to give some new information or provide further documentation regarding the need to modify the stereotyping and "conventional wisdom" regarding dental hygienists. For example, it is interesting to note that just over one-third of all respondents had worked as dental assistants prior to their dental hygiene training and that about nine percent had taken jobs as dental assistants since graduation. The extent of work as a dental assistant prior to dental hygiene training is very much influenced by the recent requirement of some dental hygiene programs to be trained formally as a dental assistant prior to entering the dental hygiene program. Whatever its origins, this would seem to be a changing characteristic of dental hygienists in Canada relative to their past experience. Although not necessarily a new revelation, it was also of interest to note that the dental hygienists had both high levels of additional post-secondary education besides

their dental hygiene training (41%) and of continuing dental education programs (80%).

Another finding which provides new information to dental manpower planners is that about 80% of the 500 respondents who were unemployed or employed in another field were still actively licensed as dental hygienists. Thus, accounting for those who did not wish to return, a potential pool of about 300 dental hygienists exists to augment the Canadian dental hygiene workforce in the future.

Consistent with data from a number of recent studies of dental hygiene in Canada and the United States, the present survey provides further evidence that the total loss of dental hygienists from the workforce as their year of graduation increases is much lower than previously believed to be the case. Thus, in the present Canadian survey, about five years after their graduation, 80% of respondents were employed full- or part-time in dental hygiene and, after 14 years, 55% were employed. Thereafter, although the numbers were small, an increasing proportion (60% - 66%) were employed which is at least suggestive of greater work activity following the early child-rearing years.

The finding that nearly 80% of currently employed dental hygienists had changed jobs once or less in the past three years (23% once, 57% not at all) did not support the contention of excessively high job mobility for hygienists. Another piece of conventional wisdom that many hygienists work in more than one position was not supported since in 1979 nearly 82% of active hygienists worked in only one position and 17% in two. Thus the number with more than two positions is negligible.

The finding that the proportion of time all respondents had worked either full- or part-time in dental hygiene relative to the total possible time (according to graduation year) they could have worked was 87% was impressively high and eye-opening. Even though this statistic is clearly biased upward by the fact that 59% of respondents had graduated in the past five years, it should be remembered, on the other hand, that the figure includes about 500 hygienists who were unemployed or were working in another field.

Nevertheless, the average hours worked per week did indicate that only one-half of ac-

tive hygienists worked full-time in dental hygiene in 1979. Although hours worked declined as age increased up to about age 40 years, the difference between the youngest age group (age 25) and the highest age group in this range (35-39) was equivalent to about one day per week (34 hours vs. 26 hours per week). After 40 years of age, although the pattern was somewhat uneven and the numbers were small, the hours worked per week seemed to increase somewhat. Simply translated, the hourly work per week data suggested that under age 30 active dental hygienists worked five full days per week and that over age 30 they worked about four full days per week, on average. This does not seem to support the notion of substantial part-time work by active dental hygienists, since so many work the equivalent of nearly 4 days per week.

Of those respondents who continued to work in dental hygiene, a great majority (87%) were satisfied with their dental hygiene careers. Unfortunately, this question was only asked of active hygienists. While it is tempting to speculate that a much lower percent of those not now actively employed in dental hygiene would claim to have been satisfied with their dental hygiene careers, the finding that only 15% of the unemployed respondents did not intend to resume their dental hygiene careers indicates that this temptation (like a number of more interesting ones in life) should be avoided.

In the next article the characteristics of the dental hygiene positions revealed in the 1979 survey will be reviewed.

Acknowledgements

The executive officers of the Ontario and Canadian Dental Hygienists' Associations are thanked for their support in the development, conduct and analysis of this survey. In this regard, thanks is especially due to Elaine Good. The Canadian dental hygienists who responded to a difficult questionnaire in such high numbers also deserve thanks. This research was mainly supported by a research grant (DM 381) from the Ontario Ministry of Health. The staff who worked on the survey were M.H. Pierce, K. Carsjo and P. Andrews and, in its early development, V.J. Sanders and E.R. Wollis. □

About the author: Dr. Don Lewis is a Professor of Community Dentistry at the University of Toronto.

CDHA Guide to Submission of Manuscripts

Manuscript:

All manuscripts submitted for consideration for publication should be typed on standard (8½ x 11) paper, double-spaced, with a margin allowance of at least one inch. Three copies should be sent to the editor, and the manuscript must not be submitted to another publication while under review. A title page should be included stating the title of the paper and the author's full name, degree, and position.

Illustrations:

Illustrations must be clearly defined and suitable for reproduction on a reduced scale. Each picture should include a legend and should be marked in numerical order. Graphs and drawings should be drawn in Indian ink on white paper. Photographs must be glossy prints.

Length:

The preferred length of a paper is 8-10 typed pages or 2000 words including references. Space for illustrations should be considered in the length.

Subheadings:

It is suggested that subheadings be used within the paper for the reader's benefit.

References:

References should be lined up numerically. References to journal articles should be made as follows: last name of author followed by initials; title of article with only the initial letter of first word capitalized; full journal name followed by volume, number, first and last pages of article to which you refer, and year.

Example:

Bell, G. Role of the dental hygienist in restorative dentistry. *Dental Health* 40: 139-141, 1973.

References to books should be made as follows: last name of author followed by initials; title of book with initial letters of all words, except connecting words, capitalized; publisher; city of publication; year of publication; page or pages to which you refer.

Example:

Guthrie, H.A. *Introductory Nutrition*. The G.V. Mosby Co., St. Louis, 1975: 153-156.

Notice of Acceptance:

Manuscripts will be acknowledged upon receipt. Authors will be notified of acceptance of their paper before publication. Rejected manuscripts will be returned.

ACHD Recommandations aux auteurs

Textes:

Les textes doivent être remis dactylographiés à double interligne, sur papier 8½" sur 11"; toutes les marges doivent être d'au moins un pouce. Les auteurs doivent remettre un original et deux copies et le texte doit être soumis uniquement à L'Hygieniste Dentaire du Canada. Une page frontispice doit inclure le titre du texte, les noms, qualités et titres et postes du (des) auteur(s).

Illustrations:

Les illustrations doivent être claires afin que leur reproduction sur échelle réduite soit possible. Chaque illustration doit être accompagnée d'une légende dactylographiée. Les graphiques et schémas doivent être dessinés convenablement, à l'encre de Chine sur papier blanc. Les photographies doivent être des épreuves glacées; elles doivent être numérotées dans l'ordre.

Longueur du texte:

La longueur des textes devrait être de 8 à 10 pages dactylographiées ou de 2000 mots y compris les références. Les espaces pris par les illustrations doivent être inclus dans ces limites.

Sous-titres:

Les sous-titres sont recommandés afin de faciliter la lecture du texte.

Références:

Les références doivent être numérotées. Les références à des articles de revues doivent être faites de la façon suivante: nom du (des) auteur(s) initiale(s); du (des) prénom(s), titre de l'article (seule la première lettre du premier mot doit être en majuscule); nom au long du journal, numéro du volume, pages de l'article, année.

Exemple:

Zangwill, O.L. Le problème de l'apraxie idéatoire. *Revue Neurologique*, 102: 595-603, 1960.

Les références à des livres doivent être faites de la façon suivante: nom du (des) auteur(s) initiale(s); titre du livre (dans les titres en langue anglaise, tous les mots sauf les mots d'accompagnement doivent commencer par une majuscule); éditeur; ville où est située la maison d'édition; année de publication, pages (s'il y a lieu).

Exemple:

Guthrie, H.A. *Introductory Nutrition*. The C.V. Mosby Co., St. Louis, 1975: 153-156.

Avis d'acceptation:

Les manuscrits seront reconnus sur réception. Les auteurs seront avisés de l'acceptation du manuscrit avant la publication. Les manuscrits refusés seront retournés.

1982-83 directory

EXECUTIVE COUNCIL:

- **PRESIDENT:** Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ont. L4W 2B7 Res. (416-624-3495) (May '82 - Sept. '83).
- **PRESIDENT ELECT:** Mary Pelletier, Box 18 Site 5, RR#7, Moncton, New Brunswick E1C 8Z4 Res. (506-384-8728).
- **FIRST VICE-PRESIDENT:** Laura Mowat, 11424 - 161 Ave., Edmonton, Alberta T5X 2L0 Res. (403-456-0977).
- **SECRETARY:** Peggy Knill, 164 Hillcrest Ave., Hamilton, Ontario L8P 2X4 Res. (416-525-5788).
- **TREASURER:** Judi Rogers, 1903 Sherwood Forest Circle, Mississauga, Ont. L5K 2E6 Res. (416-823-3822).
- **IMMEDIATE PAST PRESIDENT:** Patricia Grant, 3 Linden Lane, Halifax, Nova Scotia B3R 1N1 Res. (902-453-4761) Bus. (902-477-9876).

THE BOARD OF DIRECTORS:

- **BRITISH COLUMBIA:** Yvonne Smith, R.R. 3, Gartley Beach, Courtenay, B.C. V9N 5M8 (604-338-6470); Barbara Custance, 1892 Cochrane St., Victoria, B.C. V8R 3H3 (604-592-4105); Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- **ALBERTA:** Barbara Kara, 4112 - 27 Ave., Edmonton, Alberta T6L 4G9 (403-263-5513); Vicki Duncanson, 1629 - 20 Ave. N.W., Calgary, Alberta T2M 1G9 (403-284-2628).
- **SASKATCHEWAN:** Barbara Ferris, 5107-222 Fairmont Drive, Saskatoon, Saskatchewan S7M 4P5 (306-382-3348).
- **MANITOBA:** Gladys Stewart, 454 Niagara St., Winnipeg, Man. R3N 0V5 (204-453-1574).
- **ONTARIO:** Linda McCance, 5027 Wixon Street, Clairmont, Ontario L0H 1S0 (416-649-2056); Ailsa Wood, 505-160 Balmoral Avenue, Toronto, Ontario M4V 1J7 (416-923-1669); Dale Scanlan, 53 Ariel Court, Nepean, Ont. K2H 8J1 (613-828-7962); Linda Perron, 712-101 Governor's Road, Dundas, Ontario L9H 6L7 (416-627-7193); Jan Mulligan, 18-66 Beech Avenue, Toronto, Ont. M4E 3H4 (416-691-3866); Carolyn Roth, 184 Greenbrook Drive, Kitchener, Ontario N2M 4J7 (519-745-6664); Lise Thom, Box 293, Russell, Ontario K0A 3B0 (613-445-2892); Fern Waldman, 2008-3303 Don Mills Rd., Willowdale, Ont. M2J 4T6 (416-488-5364); Marilyn Wilson, 100 Sunset Bay, Thunder Bay, Ont. P7A 3L7 (807-344-6184).
- **QUEBEC:** Louise Delorme, 395 Morningside Crescent, Dollard-des Ormeaux, Quebec H9G 1G9.
- **NEW BRUNSWICK:** Barb McCain, 151 Canterbury Street, St. John, N.B. E2L 2E2 (506-693-5152).
- **NOVA SCOTIA:** Lisa Macdonald, 3450 St. Andrews Avenue, Halifax, N.S. B3L 3Y1 (902-455-1048).
- **PRINCE EDWARD ISLAND:** Jean MacLean, 6 Newland Crescent, Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- **NEWFOUNDLAND:** Ingrid Curtis, 67 Roche Street, St. John's, Nfld. A1B 1L9 (902-894-3294).

SPECIAL COMMITTEE CHAIRMEN:

- **CONTINUING EDUCATION:** Mickey Wener, 498 Montrose Street, Winnipeg, Man. R3M 3M9 (204-284-7474).
- **EDUCATION:** Margaret Miller, 404 - 188 Roslyn Rd., Winnipeg, Man. R3L 0G8 (204-284-7474).
- **FINANCE:** Judi Rogers, 1903 Sherwood Forest Circle, Mississauga, Ont. L5K 2E6 (416-823-3822).
- **STUDENT MEMBERSHIP:** Lise Thom, Box 293, Russell, Ont. K0A 3B0 (613-445-2892).

APPOINTEE OFFICERS:

- **EXECUTIVE SECRETARY:** Thora Appelt, 2136 Fillmore Crescent, Ottawa, Ontario K1J 6A4 (614-746-6455).
- **EDITOR:** Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2 (519-254-6224).
- **BOOKKEEPER:** Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (416-923-1669).

EXECUTIVE APPOINTMENTS:

- **SPEAKER FOR THE BOARD:** Claudia Anderson, 7586 Lambeth Drive, Burnaby, B.C. V5E 1Z5 (604-524-2737).
- **CONVENTION CHAIRMAN:** 1983: Evelyn McNee, 1509 Lynn Valley Rd., North Vancouver, B.C. V7J 2B1 (604-987-2821).
- **A.C.F.D. DENTAL HYGIENE:** Kate MacDonald, 3914 Novalea Dr., Halifax, N.S. B3K 3G7 (902-445-8868).
- **DENTAL AUXILIARY LIAISON OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Saskatchewan, S4T 1L6 (306-569-1603).
- **INTERNATIONAL LIAISON CHAIRMAN:** Sharon French, 39 Chinook Cres., Nepean, Ontario K2H 7C9 (613-820-1196).
- **DATA BANK REPRESENTATIVE:** Pat Johnson, Oak Deane, R.R. 2, Aurora, Ontario L4G 3C8 (416-727-1433).
- **CDA COUNCIL ON HEALTH CARE:** Kate MacDonald, 3914 Novalea Dr., Halifax, N.S. B3K 3G7 (902-445-8868).
- **CDA COUNCIL ON EDUCATION:** Margaret Miller, 404 - 188 Roslyn Rd., Winnipeg, Man. R3L 0G8 (204-284-7474).
- **CSA TECHNICAL COMMITTEE ON DENTISTRY:** Anne Bosy, 1529 Ballyclare Drive, Mississauga, Ontario L5C 1J4 (416-270-4019).
- **OFFICER OF CDHA ORGANIZATION AND PROCEDURES:** Marjorie Dimitri, 1606 Ayleslynn Drive, North Vancouver, B.C. V7J 2T3 (604-987-7392).
- **PORTABILITY OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Sask. S4T 1L6 (306-569-1603).
- **MEMBERSHIP PROMOTION CO-ORDINATOR:** Debbie Lang.

STANDING COMMITTEES:

MEMBERSHIP:

- **CHAIRMAN:** Jo Gardner, 1125 West 54th Ave., Vancouver, B.C. V6P 1N3 (604-261-8642).
- **B.C.:** Holly Wilson, 1575 Montgomery Ave., Victoria, B.C. V8S 1T5 (604-595-7980).

- **Alta.:** Linda Klem, 10651 Mapleglen Cr. S. Calgary, Alta. T2J 1X1 (403-278-6203).
- **Sask.:** Darlene Armstrong, 43-35 Centenn St., Regina, Saskatchewan S4S 6P8 (306-586-9457).
- **Man.:** Darlene Armstrong, 43-35 Centenn St., Regina, Saskatchewan S4S 6P8 (306-586-9457).
- **Ont.:** Kathleen Feres-Patry, 10C Stonel Crt., Kanata, Ont. K2M 1G2 (613-592-5934).
- **Que.:** Louise Delorme, 395 Morningside Crescent, Dollard-des Ormeaux, Quebec H9G 1G9.
- **N.B.:** Brenda Dickie, Bldg. 6, Apt. 3, Greenwood Park, R.R.6, Rothesay, N.B. E0G 2V1 (506-849-2701).
- **N.S.:** Diane Dobson, 242 Duke Street, Apt Chester, N.S. B0J 1J0.
- **P.E.I.:** Florence Wall, Mt. Herbert, R.R. Charlottetown, P.E.I. C1A 7J8 (902-52079).
- **Nfld.:** Coleen Thomey, P.O. Box 544, Mor Pearl, Nfld. A1B 2W4.

MANPOWER AND UTILIZATION:

- **CHAIRMAN:** Jenny Thomas, 2759 Sal Street, Ottawa, Ont. K2B 6P8 (613-820-0400).
- **B.C.:** Randy McIlraith, 301 - 1629 Haro Street, Vancouver, B.C. V6G 1N8 (604-684-2813).
- **Alta.:** Drene Bertrand, 1074 - 56th St., monton, Alta. T6L 1Y3 (403-489-6898).
- **Sask.:** Bev Upton, 143 Bothwell Cres., gina, Sask. S4R 5Y7 (206-545-7563).
- **Man.:** Ruth Konzelman, 105 Olivier A Selkirk, Man. R1A 0C4 (204-482-6112).
- **Ont.:** Jenny Thomas, 2759 Selina Street, tawa, Ontario K2B 6P8 (613-820-0405).
- **Que.:** Louise Delorme, 395 Morningside Crescent, Dollard-des Ormeaux, Quebec H9G 1G9.
- **N.B.:** Sharyn Milroy, 85 Oakmore Terrace, Moncton, N.B. E1G 1T4 (506-384-1961).
- **N.S.:** Linda Zambolin, 114 Regal I Dartmouth, N.S. B2W 4H8 (902-434-8983).
- **P.E.I.:** Heather Keith, 4 Belvedere Ave., Charlottetown, P.E.I. C1A 6A8 (902-892-9361).
- **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's, Nfld. A1B 1L9 (709-722-1603).

COMMUNITY DENTAL HEALTH:

- **CHAIRMAN:** Joanne Clovis, Seventh Plaza, 10030 - 107 St., Edmonton, Alta. T6E 3E4 (403-476-6596).
- **B.C.:** Karen Fawley, 305-252 W. 2nd North Vancouver, B.C. V7M 1C8 (604-3762).
- **Alta.:** Heather McElroy, General Delivery Stettler, Alta. (403-742-5543).
- **Sask.:** Maureen Bowerman, 51 Huron Plaza, Saskatoon, Sask. S7K 4E8 (306-664-3078).
- **Man.:** Ruth Konzelman, 105 Oliver Ave., Selkirk, Man. R1A 0C4 (902-482-6122).
- **Ont.:** Laurie Lepik, 70 Sixth St., Toronto, Ont. M8V 3A2 (416-259-6078).
- **Que.:** Louise Delorme, 395 Morningside Crescent, Dollard-des Ormeaux, Quebec H9G 1G9.
- **N.B.:** Connie Maddox-Campbell, 860 Ave., Bathurst, N.B. E2A 1W1 (506-69161).
- **N.S.:** Terry Mitchell, 1676 Larch St., Apt 1, Halifax, N.S. B3H 3X1.

- P.E.I.: Pat Stewart, Travellers Rest, Summerside, P.E.I. (902-436-2709).
- Nfld.: Ingrid Curtis, 67 Roche St., St. John's, Nfld. A1B 1L9 (709-722-1603).

NOMINATIONS:

- CHAIRMAN: Mary Pelletier, Box 18, Site 5, R.R.7, Moncton, N.B. E1C 8Z4 (506-384-8728).
- B.C.: Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- Alta.: Paulette Schulte, 10947 - 36A Ave., Edmonton, Alt. T6J 0E3 (403-434-0925).
- Sask.: Barb Long, 2741 Preston Ave., Saskatoon, Sask. S7G 3G2 (306-373-7434).
- Man.: Kim Harrop, 658 Government Ave., Winnipeg, Man. R2K 1X2 (514-667-0831).
- Ont.: Jan Mulligan, 18-66 Beech Avenue, Toronto, Ont. M4E 3H4 (416-691-3866).
- Que.: Louise Delorme, 395 Morningside Crescent, Dollard-des Ormeaux, Quebec H9G 1G9.
- N.B.: Pam Mosher, 1064 Salisbury Rd., Moncton, N.B. E1E 3V6 (506-855-2815).
- N.S.: Yolanda Bresolin, 16½ Sunset Court, Truro, N.S. B2N 3W1.
- P.E.I.: Jean MacLean, 6 Newland Cres., Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- Nfld.: Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).

CONSTITUTION:

- CHAIRMAN: Laura Mowat, 11424 - 161 Ave., Edmonton, Alta. T5X 2L0 (403-456-0977).
- B.C.: Barbara Custance, 1892 Cochrane St., Victoria, B.C. V8R 3H3 (604-592-4105).
- Alta.: Marg Wilson, 8739 - 67 Ave., Edmonton, Alta. T6J 0E3 (403-434-0925).
- Sask.: Joan Foster, 545 Laurier Drive, Swift Current, Sask. S9H 1L3 (306-713-8754).
- Man.: Louise Dufault, 82 Reil St., Winnipeg, Man. R2M 0Y2 (204-256-9115).
- Ont.: Sue Cathers, 129 Balmoral Street, Thunder Bay, Ont. P7C 4J6 (807-622-2808).
- Que.: Louise Delorme, 395 Morningside Crescent, Dollard-des Ormeaux, Quebec H9G 1G9.
- N.B.: Trudy McAvity, Box 949, Rothesay, B.C. E0G 2W0 (506-847-5502).
- N.S.: Linda Zambolin, 114 Regal Road, Dartmouth, N.S. B2W 4H8 (902-434-8983).
- Nfld.: Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).
- P.E.I.: Debbie Richard, 19 Milbrooke Dr., Charlottetown, P.E.I. C1A 7V2 (902-569-4490).

PROVINCIAL NEWSLETTER EDITORS:

- B.C.: Pat Bowman, 926 W. 22nd Ave., Vancouver, B.C. V5Z 2A1 (604-736-0962).
- Alta.: Adeline Fiorillo, 8911 - 138 Ave., Edmonton, Alta. T5E 2A7.
- Sask.: Marg Bailey, Box 2228, Kindersley, Saskatchewan S0L 1S0 (306-463-2397).
- Man.: Joanne Presunka, 139 Hawkins, Winnipeg, Man., R2N 1H9 (204-254-8203).
- Ont.: Jane Rogers, 10 Lyle Place, Kitchener, Ontario N2B 2J6 (519-576-3718).
- Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1 (514-352-6245).
- N.B.: Nancy Mills, 20 Wilson Rd., Riverview, N.B. E1B 2V8 (506-386-3734).
- N.S.: Diane Forrest, 209-7 Parker St., Dartmouth, N.S.; Cindy Forward, Oyster Pond, Jeddore, N.S.
- Nfld.: Pam Vokey, P.O. Box 205, Gander, Newfoundland A1V 1W6.
- P.E.I.: Frances Piercey, 3 Sunset Drive, Charlottetown, P.E.I. C1A 3J6. □

Help Us Cut Costs

Did you know it costs the CDHA 45¢ for each address correction given by the post office? To remain that returned journal once the new address has been located costs us another 45¢, making our bills for postage due run into several hundred dollars a year.

Help us avoid this expense. Send us your change of address as soon as you know you'll be moving. We'll save money, and you'll continue to receive **The Canadian Dental Hygienist** without interruption. If you're moving, please detach the address label on your envelope, correct it, then paste it in the blank provided & mail this. . . .

Name _____
 Address _____
 City _____
 Province _____
 Postal Code _____

Mail to: Jo Gardner, CDHA Membership Chairman
 1125 West 54th Avenue
 Vancouver, B.C. V6P 1N3

Ministry of Health, Dental Hygienists

Competition 38A —

\$20,784-\$23,808

There are currently eight excellent opportunities available throughout B.C. for career-minded enthusiastic hygienists. Competition will also establish an Eligibility List for future vacancies. Duties include assuming responsibility for pre-school, school and adult dental programs, delivering educational/motivational lessons, inspections/referrals and supervising staff; other related duties as required.

Qualifications — Graduation from recognized university with diploma in dental hygiene or equivalent.

May be required to drive personal car on expenses or Government car.



Province of British Columbia
Public Service Commission

Positions
 are open to both
 men and women.
 Please send resume
 quoting competition number to:

544 Michigan Street, Victoria, B.C., V8V 1S3

October is cfde / fced month

1981 contributors/donateurs

- Almond, D. J.
Bailey, M.
Baker, J.
Barney, W.
Bassett, S.
Bateson, N.
Bissylas, M. P.
Black, A. M.
Boomhour, L. H.
Bosy, A.
Brownstone, E. G.
Bryant, S. D.
Buitenhuis, J. H.
Carter, N.
Casey Saris, H. M.
Cauch, D. A.
Chabot Hoculik, R.
Chochla, L. F.
Christie, P. L.
Chu, R. C.
Ciurea, M. O.
Clark, E. M.
Clarke, M. L.
Cohen, M.
Collard, N.
Conklin, J. T.
Cooper, S. J.
Cormier, D.
Cosgrove, E. A.
Craig, B. J.
Craven, R. A.
Davey, L. E.
DeMarchi, F. E.
Dempster, L. J.
DePelham, C.
Diez d'Aux, J. L.
Dimitri, M. J.
Diotte, J. E.
Doris, A. M.
Drennen, J. L.
Duncanson, V. M.
Falconer, C.
Faragher, D. J.
Feller, S. J.
Feres Patry, K.
Finch, C.
Forgay, M. G. E.
French, S. B.
French, S. H.
Gardner, W. J.
Gibson, S. L.
Girardin, D.
Good, E.
Gouweloos, T. L.
Grant, D. M.
Grant, L.
Gravelle, L.
Halowski, W. A.
Harwood, N. E.
Hewton, B. I.
Hirtle, L.
Hornby, N. L.
Horton, L. N.
Hubbard, F. M.
Hudspeth, L. M.
Isaac, S. E.
Jacobson, J.
Jones, E. A.
Joudrey, D. M.
Kachuck, B. E.
Kassirer, B.
Kenny, A. E.
Kereluk, L. J.
Killips, C. J.
Kline, C.
Ko, C.
Koenig, L.
Kolthammer, M. A.
Krievins, T.
Lane, S. M.
Lang, D.
Sunderland, Ont.
Kindersley, Sask.
Toronto, Ont.
Oshawa, Ont.
Toronto, Ont.
Regina, Sask.
Willowdale, Ont.
Aurora, Ont.
Brampton, Ont.
Mississauga, Ont.
Winnipeg, Man.
Regina, Sask.
Toronto, Ont.
Burlington, Ont.
Toronto, Ont.
Toronto, Ont.
St. Catharines, Ont.
Toronto, Ont.
Mississauga, Ont.
Salmon Arm, B.C.
Oakville, Ont.
Mississauga, Ont.
Richmond Hill, Ont.
Willowdale, Ont.
Toronto, Ont.
St. Albert, Alta.
Kitchener, Ont.
Oshawa, Ont.
Labrador City, Nfld.
Vancouver, B.C.
Waterloo, Ont.
Bracebridge, Ont.
St. Catharines, Ont.
Toronto, Ont.
Toronto, Ont.
Toronto, Ont.
North Vancouver, B.C.
Don Mills, Ont.
Peterborough, Ont.
Erin, Ont.
Calgary, Alta.
Toronto, Ont.
St. Catharines, Ont.
Stonewall, Man.
Kanata, Ont.
Richmond, B.C.
Winnipeg, Man.
Ottawa, Ont.
Ottawa, Ont.
Vancouver, B.C.
Agincourt, Ont.
LaSalle, Man.
Kitchener, Ont.
London, Ont.
London, Ont.
Sherwood Park, Alta.
Mississauga, Ont.
New Westminster, B.C.
Vernon, B.C.
West Vancouver, B.C.
Salmon Arm, B.C.
Oshawa, Ont.
Bramalea, Ont.
Vancouver, B.C.
Pefferlaw, Ont.
Windsor, Ont.
Dollard-des-Ormeaux, Que.
Brampton, Ont.
Cobourg, Ont.
Don Mills, Ont.
Willowdale, Ont.
Burlington, Ont.
Hamilton, Ont.
Edmonton, Alta.
Vancouver, B.C.
Don Mills, Ont.
Edmonton, Alta.
Kamloops, B.C.
Toronto, Ont.
Bramalea, Ont.
Mississauga, Ont.
Larder, P. M.
Lawson, F.
Link, L. L.
Louann, F.
MacDonald, K. F.
MacLean, S. R.
McAvity, T. H.
McGuire, V. A.
McIntyre, R.
McKenzie Barnswell, S.
McLachlan, M. E.
McLachlan, P. R.
McNee, E. D.
Mickelson, L. L.
Miller, M. E.
Mitchell, A.
Mondrow, G. T.
Muise, L. C.
Mulligan, J. L.
Nagle, S. L.
Neale, P. M.
Ono, C. K.
Parlett, K. L.
Petrossi, S.
Pfaff, J. M.
Phillips-Frost, C. D.
Pinto, C. R.
Plaetzer, W. J.
Redmond, L. J.
Robinson, M. M. E.
Rogers, J. I.
Rosenthal, C. R.
Samsonoff, M.
Santana, D. C.
Sargent, G. E.
Saunderson, S. L. D.
Shantz, A. E.
Silverstein, L. G.
Sipko, K. E.
Smith, Y. M.
Sone, E. S.
Steady, D. A.
Street, M. D.
Strevens, L. D.
Sturmwind, D. M.
Thom, H. C.
Thorp-Moa, G. L.
Timgren, B. J.
Timms, E. A.
Tod, V. J.
Uchikata, M. J.
Van Dyk, D. D.
Van Vliet, J.
Visocchi, B.
Voris, J. S.
Wailing, M. A.
Wainberg, K.
Walker, W. J.
Watts, L. M.
Watts, S.
Wener, M. E.
White, K.
Williams, J. M.
Wood, A. E.
Yakobowski, B. E.
Zarosa, A. C.
Zentil, I.
Zurbrigg, J. R.
Halifax, N.S.
Vancouver, B.C.
Cayuga, Ont.
Vancouver, B.C.
Halifax, N.S.
Toronto, Ont.
Rothsay, N.B.
Ottawa, Ont.
Oshawa, Ont.
Agincourt, Ont.
London, Ont.
Burlington, Ont.
North Vancouver, B.C.
Thunder Bay, Ont.
Winnipeg, Man.
Truro, N.S.
Thornhill, Ont.
St. Catharines, Ont.
London, Ont.
Windsor, Ont.
Peterborough, Ont.
Toronto, Ont.
Bracebridge, Ont.
Willowdale, Ont.
Etobicoke, Ont.
Oakville, Ont.
Toronto, Ont.
London, Ont.
Brookville, Ont.
Vancouver, B.C.
Kitchener, Ont.
Willowdale, Ont.
Surrey, B.C.
Sault St. Marie, Ont.
Thunder Bay, Ont.
Calgary, Alta.
Waterloo, Ont.
Downsview, Ont.
Richmond, B.C.
Courtenay, B.C.
Willowdale, Ont.
Kingston, Ont.
Calgary, Alta.
Scarborough, Ont.
Victoria, B.C.
Nepean, Ont.
West Vancouver, B.C.
Willowdale, Ont.
Mississauga, Ont.
Burlington, Ont.
Ottawa, Ont.
Stoney Creek, Ont.
Whitby, Ont.
Vinemount, Ont.
Vancouver, B.C.
Young, Sask.
Thornhill, Ont.
Toronto, Ont.
Calgary, Alta.
Kelowna, B.C.
Winnipeg, Man.
Ottawa, Ont.
Fonthill, Ont.
Toronto, Ont.
Port Colborne, Ont.
Toronto, Ont.
Thornhill, Ont.
King City, Ont.

Dental Hygienists' Associations — 1981

Alberta Dental Hygienists' Association
British Columbia Dental Hygienists' Association
Canadian Dental Hygienists' Association
Hamilton & District Dental Hygiene Society
Manitoba Dental Hygienists' Association
Ontario Dental Hygienists' Association
Ottawa Dental Hygienists' Society

classified ads

Classified Advertising Rates:

50 words or less, per ad (minimum) \$20.00 plus 50¢ for each additional word. Payments must accompany ad copy (cheque or money order).

Direct Ads To:

The Canadian Dental Hygienist
% Stephanie Nagle
2221 Victoria Ave.
Windsor, Ontario N8X 1R2
(519-254-6224)

ORIGINAL HYGIENE HASTY NOTES by Sue Scott©. To order your package of 8 notes (4 different situations in all) send your \$4.00 cheque or money order to: The Toronto Central Component Dental Hygiene Society, Catherine Barlow, 715 Don Mills Road, Apt. 2208, Don Mills, Ontario M3C 1S5.

Call for Applications for the Position of EXECUTIVE SECRETARY. The Canadian Dental Hygienists' Association is seeking an Executive Secretary. The successful candidate must live in close proximity to the Ottawa area, and should be a person with excellent secretarial skills, who would be responsible for providing administrative support to the elected officials of our Association. This is a part-time position and salary is commensurate with experience. Please reply in writing

before Sept. 15 1982 to: CDHA President, 1755 Bough Beeches Blvd. Mississauga, Ontario L4W 2B7.

DENTAL HYGIENIST or AUXILIARY required by Cameron Dental Clinic in Yellowknife, NWT. Newly opened clinic, extremely busy with excellent supportive and happy staff. Yellowknife population approx. 12000. Young and lively town with lots of activities both in summer and winter. Excellent opportunity for anyone. Please contact Drs. H. Adam or H. Biati, P.O. Box 1025, Yellowknife, NWT. X0E 1H0. Phone 403-920-2225.

VICTORIA, B.C. Full-time HYGIENIST for preventive, perio conscious, family practice. No appointment pressure, no time restrictions per patient, hygienist rebooks as she feels necessary. Practice has had hygienist for 8 years. Please contact Dr. Murray Kosick collect 656-3321 office, 656-2976 residence.

Full-time position available immediately for enthusiastic, energetic hygienist. Excellent daily wage offered. Send resume to Quil-Den Management, Box 1057, Merritt, B.C. V0K 2B0.

DALHOUSIE UNIVERSITY, DIRECTOR, SCHOOL OF DENTAL HYGIENE. Dalhousie University invites applications for the above position. The successful applicant will likely have both

dentally and/or administratively related experience, and qualifications to at least the Master's level.

In accordance with Canadian Government Immigration Requirements, consideration will be given, IN THE FIRST INSTANCE, to Canadian citizens or landed immigrants.

The position is available as of July 1983, or at such other time as is mutually agreeable. Academic rank and Salary commensurate with qualifications and experience.

Apply to Dr. Crawford Bain

Head, Division of Periodontics
Chairman, Search Committee for
Dental Hygiene Director
Faculty of Dentistry
Dalhousie University
5981 University Avenue
Halifax, Nova Scotia
Canada B3H 3J5

Thinking of B.C.? Prince Rupert, the sight of one of Canada's largest megaprojects, is in need of a hygienist. We have a well established hygiene program of three, four, and six month recalls. Among the varied responsibilities are panoramic xrays, root planing, and fissure sealants. Four day week, flexible hours, wages within top of B.C. scale. Motherhood is beckoning and I'd hate to see the program flounder. If interested please contact me. Gerry Cool, % Dr. R.M. Waddell, 336-2nd Avenue West, Prince Rupert, B.C., (Home: 604-624-5419). □

When you need experienced dental hygienists, an ad in our classified section can put you directly in touch with every qualified candidate in Canada. Just write your copy below and mail directly to Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2 (519-254-6224)

Run this advertisement _____ times.

Name _____ Address _____

Telephone _____ Signature _____

Effect of professional prophylaxis on caries, gingivitis

The clinical trial in which 104 children, 13 to 14 years of age, participated was performed to assess the effect on caries and gingivitis of plaque control measures such as oral hygiene instruction, brushing practice, and professional prophylaxis.

At a baseline examination, the oral hygiene status, gingival inflammation, and caries were rated. The children were separated into two groups, and each received a professional prophylaxis once every two weeks during the 18-month study period. The prophylaxis was restricted randomly to either the right or left side of the jaws. In addition, children in one group received careful oral hygiene instruction at each recall appointment and practice in proper brushing and flossing methods. A fluoride dentifrice was used by all participants.

At the end of 18 months, the oral hygiene status was substantially improved and clinical signs of gingivitis and caries were effectively reduced through use of the professional prophylaxis every other week. It was also observed that although oral hygiene instruction and practice in proper brushing and flossing methods reduced plaque and gingivitis, no such effect could be detected regarding the development of caries. [Axelsson, Per, and Lindhe, Jan. Department of Periodontology, Faculty of Odontology, Box 33070, S-400 33 Gothenburg, Sweden (Lindhe). Effect of oral hygiene instruction and professional toothcleaning on caries and gingivitis in schoolchildren. *Comm Dent Oral Epidemiol* 9(6): 251-255, 1981]

Appearance of enamel after debonding

How exacting practitioners should be about the debonding stage and whether small remnants of adhesive are of clinical significance was examined in this study involving 44 consecutive patients who were to have premolars extracted.

In the use of the bonding agent,

the manufacturer's instructions were followed carefully. The bracket bases were seated as firmly as possible, and excess resin was removed scrupulously, using loupes to improve vision. After a week, the teeth were debonded and carefully cleaned to remove all detectable traces of residual adhesive. Loupes were again used, and a dental probe was run over the tooth surface to feel for tags of resin. The mean time taken per tooth was 4½ minutes. The brackets were removed with the use of specifically designed pliers, gross adhesive was scraped with a scaling instrument, and remnants were removed by a bur rotating at speeds of 20,000 to 30,000 revolutions a minute. Final polishing was then accomplished. Six weeks later, the teeth were extracted.

Two dentists and a dental hygienist attempted to detect the debonded pairs of teeth before and after they had been extracted. At the first examination, the frequency of detection of debonded teeth was no greater than would be expected by chance. After the extracted teeth had been stained artificially, however, there was an increase in the detection of the debonded teeth. In every tooth examined microscopically, small areas of resin remained. Zones of resin were particularly evident in the cervical area of the buccal surface, where it was presumably more difficult to remove material.

Although it is not suggested that severe staining is likely to occur in a normal diet, dentists should remember that adhesive resin remnants may remain after debonding and there is a possibility that tooth appearance could be altered. Bonding has shifted the time-consuming tasks from the beginning to the end of the course of treatment. [Sandison, R.M., University of Manchester Dental Hospital, Bridgeford St., Manchester, England. Tooth surface appearance after debonding. *Br J Orthod* 8(4):199-201, 1981]

Influence of contraceptive therapy on the periodontium

The influence on the periodontium of the duration of oral contra-

ceptive use was evaluated in this study with 49 women who had been taking oral contraceptives for more than five years, 63 women who had been taking them for less than five years, and 39 women who formed a control group. The concentration of hormones that were used by the women varied: the estrogen content of the preparations was between 20 and 50 ug, and the progestagen content was between 0.15 and 4.0 mg.

In the clinical examinations, the plaque index was taken, and a probe was used to detect the presence of deposits. The modified gingival index was used to assess gingivitis, depths of pockets were recorded, and the distance from the gingival margin to the cemento-enamel junction was measured to determine the loss of attachment.

An increase in the gingival index, particularly for the younger age group, was found with the duration of therapy; for both age groups, the result was significant at the .05 level. There was significantly more inflammation in the older subjects for all the medication periods ($P < .01$).

No significant change in the level of attachment was related to the medication period.

The gingival index values were related to the level of plaque and duration of therapy, and generally, increased inflammation was found with increased periods of medication. There was also significantly more inflammation as plaque scores increased for all three groups of subjects. The level of attachment was related to the plaque scores and duration of therapy. However, statistical analysis for the combined data relating plaque scores and duration of therapy to loss of attachment was not significant.

Results of the study showing that the degree of gingival inflammation was related to the duration of medication indicates that this effect is cumulative with time. [Pankhurst, C.L.; Waite, I.M.; Hicks, K.A.; Allen, Y.; and Harkness, R.D. School of Medicine, University College London Dental School, Mortimer Market, London WC1E 6JD (Waite). The influence of oral contraceptive therapy on the periodontium — duration of drug therapy. *J Periodontol* 52(10):617-620, 1981] □

Dental Hygienists

Get the facts now
about the challenge and
opportunity of a
Canadian Forces career.

If you have successfully completed a community college program and have certification as a Registered Dental Hygienist, you may join the Canadian Armed Forces.

The Canadian Forces offer steady employment, accelerated promotion, modern equipment, good income, fringe benefits, and a rewarding career.

Join the proud people serving all across Canada and overseas. For more information, visit your nearest recruiting centre, or mail the coupon below. You can also call us collect. We're in the Yellow Pages under "Recruiting".



THE CANADIAN ARMED FORCES.

Canada

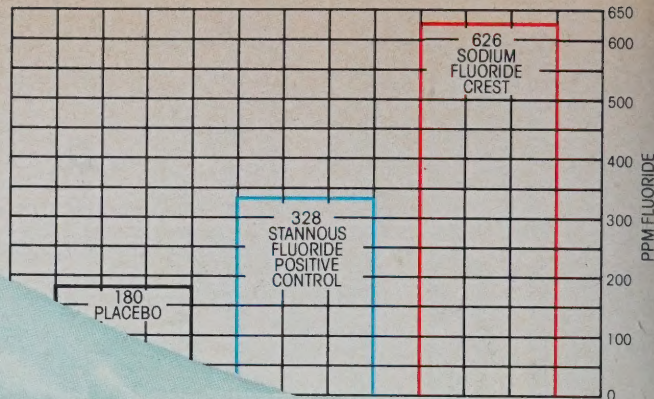
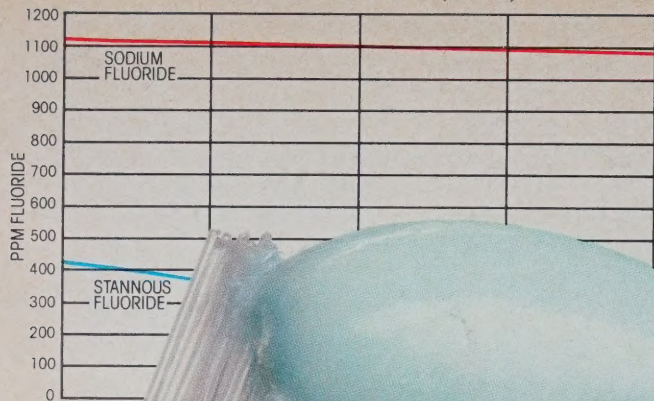
The career with a difference.

Director of Recruiting & Selection
National Defence Headquarters
Ottawa, Ontario K1A 0K2

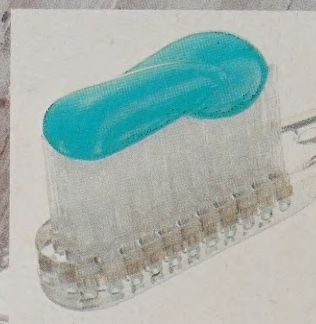
I am interested in dental hygiene career opportunities in the Canadian Forces.

Name _____ Tel. _____
Address _____
City _____ Prov. _____ Postal Code _____

There's no life like it.



MORE FREE FLUORIDE GIVES TODAY'S CREST MORE FIGHT THAN EVER BEFORE



Even better cavity protection than previous Crest.^{1,2}

Today's Crest supplies 3 to 5 times more free fluoride to the tooth.³ More importantly, a new study by Dr. M. J. Mobley⁴ shows that this fluoride is taken up by decalcified enamel at nearly twice the level of previous Crest. It has been suggested that a high level of free fluoride in incipient carious lesions accelerates the natural remineralization process.⁵⁻⁸

This helps explain why Crest gives your patients more fight than ever before.

Even better patient compliance with a new great-tasting gel.

Crest's unique active/abrasive formula is now available in a third flavour, a translucent blue gel. It's an excellent chance for improved compliance, particularly with your younger patients! No wonder Crest still leads in good dental health for the whole family.

References

1. Zacherl, W.A.: Pharm Therap Dent, 6:1-7, 1981.
2. Beiswanger, B.B., Gish, C.W., Mallatt, M.E.: Pharm Therap Dent, 6:9-16, 1981.
3. Data on file at Procter & Gamble Inc.
4. Mobley, M.J.: J Dent Res, 60 (12):1943-1948, 1981.
5. Arends, J., ten Cate, J.M.: J Cryst Gro, 53:135-147, 1981.
6. Silverstone, L.M.: Caries Res, 11 (Suppl. 1):59-84, 1977.
7. Ostrom, C.A., et al: J Dent Res, 56(3):212-221, 1977.
8. Zahradnik, R.T.: J Dent Res, 59(6):1065-1066, 1980.



You've never had better reason to recommend Crest.

Crest



Crest* contains sodium fluoride which is, in our opinion, an effective decay preventive agent, and is of significant value when used in a conscientiously applied program of oral hygiene and regular professional care.

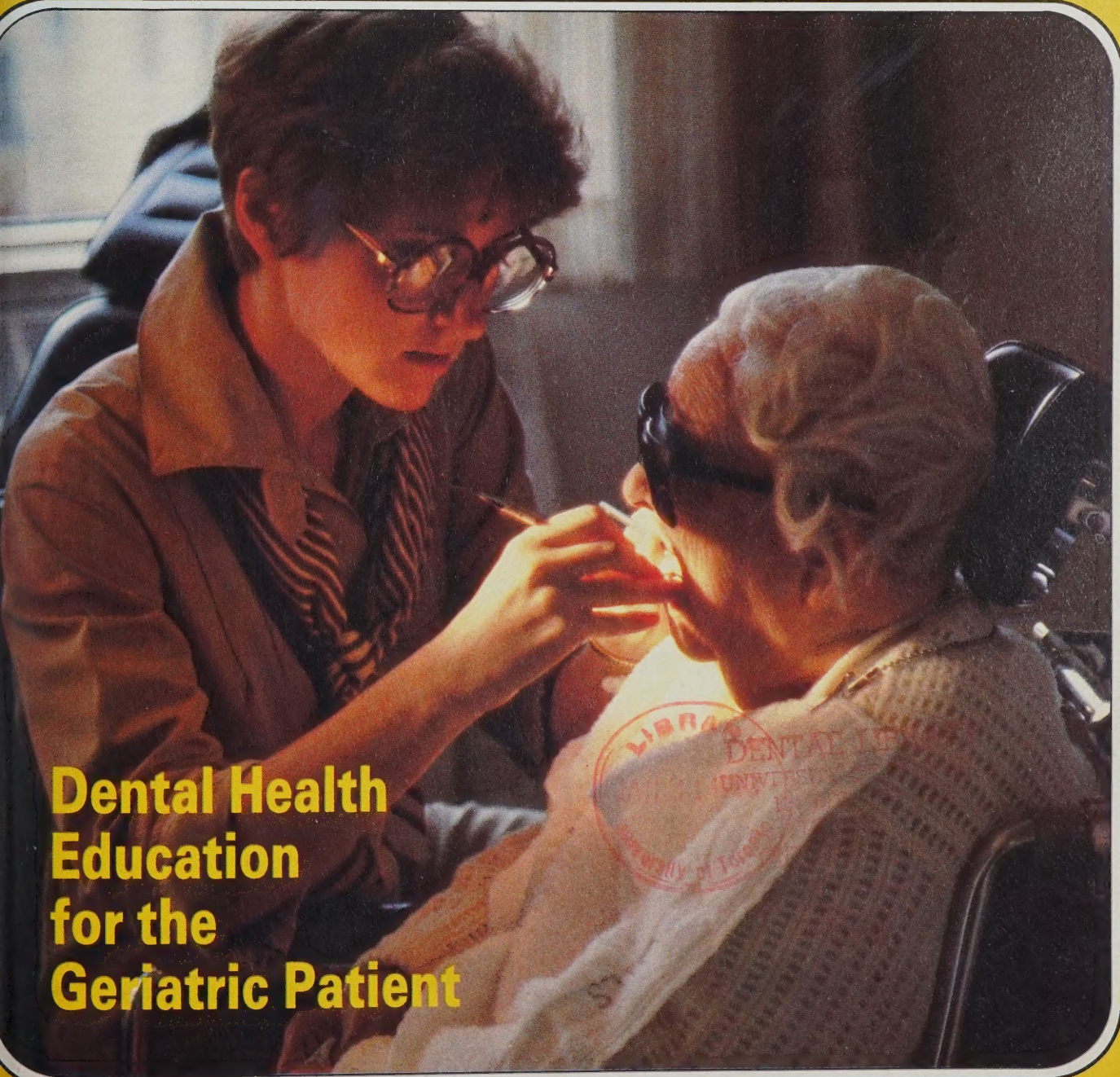
CANADIAN DENTAL ASSOCIATION

the canadian dental hygienist

l'hygieniste dentaire du canada

WINTER 1982 HIVER

VOLUME 16, NO. 4



**Dental Health
Education
for the
Geriatric Patient**

CELEBRATE WITH DENTAL HYGIENE AT DALHOUSIE POST COLLEGE ASSEMBLY '83

Halifax, N.S.
May 8, 9 and 10, 1983

Dental Stress: Burnout Prevention for the Dental Team
— Arlene Levin, R.D.H., B.Sc., M.S.W.

PLUS

**Presentations on Financial
Planning, Taxation and
Management Issues
Abstract Sessions, Sunday
Evening Buffet &
Luncheons**

**20 Graduating Classes
in Dental Hygiene**

**75 Years of Dental Education
at Dalhousie University**

Dalhousie Graduates: Watch your mail for news of reunions

*If we don't get in touch with you . . .
get in touch with us:*

Continuing Education in Dentistry
Dalhousie University
Halifax, N.S. B3H 3J5

CALL: (902) 424-2248 or 424-6507



Dentistry
Dalhousie
Anniversary
75

the canadian dental hygienist

l'hygieniste dentaire du canada

contents/contenu

COVER STORY

Our cover photograph was taken in 1979 by Dr. D. W. Banting, Chief of Dentistry, Parkwood Hospital; a hospital for the chronically ill in London, Ontario. The hygienist in the illustration is CDHA's editor, Stephanie Nagle, who was working part-time at Parkwood's dental clinic then, providing preventive and maintenance hygiene services for the institutionalized geriatric patient. Dental health education for the geriatric patient is the topic of the article on page 110, which discusses how dental hygienists can serve both the institutionalized and non-institutionalized elderly person.

staff/ l'atelier

Editor/Redacteur en chef
Stephanie Nagle
2221 Victoria Avenue,
Windsor, Ontario N8X 1R2

Publisher/Editeur
Advertising Manager/
Gérant de la publicité
J.S. Woloschuk
Controlled Publications

Subscriptions Manager/
Gérant des abonnements
Controlled Publications
680 E.C. Row,
P.O. Box 1029, Station "A",
Windsor, Ontario

Advisors/Conseillers
Joan Voris, 3589 Osler Street,
Vancouver, B.C. V6H 1M3

Marjorie Dimitri
1606 Ayleslynn Drive,
Vancouver, B.C. V7J 2T3

Louise Gosemick
8078 De Lorimier,
Montreal, Quebec H2E 2P9

articles/articles

Factors Influencing Dental Health
Education for the Aged, Barbara Zier
Dip. Dent. Hyg., B.Ed., M.Ed. 110

Characteristics of Dental Hygiene
Positions in Canada, 1979, Part I.
D. W. Lewis, D.D.S., D.D.D.D., M.S.C.D., F.R.C.D. (C)
and Tamara Krievins, R.D.H., B.Sc.D. 114

features/reportage

Comment: Are the Good Times Gone?
Linda Berry 104

Personal Finance: Why Would You Buy
Common Stock? Glendene Sivers 109

Alternatives: Teaching Master, Dental Auxiliary
Program in an Ontario Community
College. Louise Chochla, R.D.H., B.Sc.D. 119

Self-Assessment Test 108

departments/sections

Newsline 105 Abstracts 121

Directory 1982-83 ... 122 Annual Index 124

Classified Advertising 125

THE CANADIAN DENTAL HYGIENIST is the official journal of the Canadian Dental Hygienists' Association and is published quarterly.

All journal communications should be directed to the Editor, except subscription and advertising matters which should be addressed to the respective staff members.

Subscription rates for non-members are: \$15.00 per year in Canada and \$22.50 per year foreign.

The opinions expressed in editorials or articles are those of the authors and do not necessarily represent the views of the Association, the Publisher or the Editor.

L'HYGIENISTE DENTAIRE DU CANADA est la revue officielle de l'Association des hygiénistes dentaires du Canada et est publiée à tous trois mois.

Toutes communications ayant trait à la revue devraient être adressées au Rédacteur en chef, à part les abonnements et tout ce qui concerne la publicité, ce qui, de leur côté, devraient être adressés aux membres du personnel respectifs.

Les tarifs d'abonnements pour les non-membres sont les suivants: \$15.00 par année au Canada et \$22.50 par année en pays étranger.

Les opinions exprimées dans les editoriaux ou dans les articles celles des auteurs et ne représentent pas nécessairement les points de vue de l'Association, de l'Editeur or du Rédacteur.



TODAY'S COLGATE: TWO FLUORIDE REMINERALIZATION

Today's Colgate was developed on the principle that if a toothpaste combines two fluorides which act differently, it may provide enhanced remineralization over a single fluoride toothpaste. We believed this would result in fewer cavities for your patients than ever before.

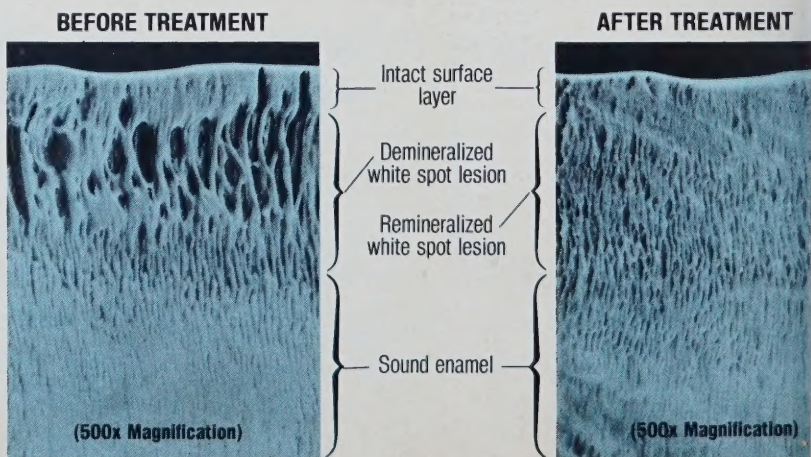
REMINERALIZATION.

Remineralization is the reversal of the demineralization process before a white spot lesion becomes a cavity (1). Studies have indicated that the presence of fluorides in demineralized enamel improves the natural remineralization process (2-5).

COLGATE'S TWO FLUORIDE STUDY.

In vitro studies (6) on demineralized enamel show that treatment with Colgate's combination of sodium monofluorophosphate and sodium

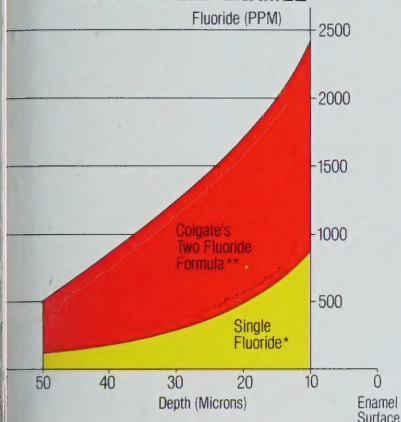
fluoride** actively promotes more complete remineralization of white spot lesions than a single fluoride formulation.* The improved remineralization of white spot lesions, we believe, ultimately leads to a greater reduction in cavities.



HOW TWO FLUORIDES REMINERALIZE MORE COMPLETELY.

Laboratory research shows that Colgate's combination of sodium monofluorophosphate at 0.76% and sodium fluoride at 0.10% delivers significantly more fluoride deeper into demineralized enamel, thus providing superior conditions for remineralization.

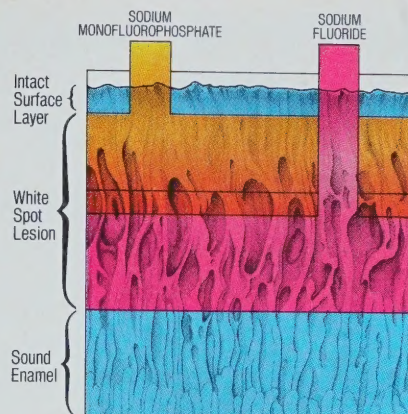
FLUORIDE UPTAKE BY DEMINERALIZED ENAMEL



Within the white spot lesion, sodium monofluorophosphate remineralizes enamel primarily at the surface while sodium fluoride penetrates deeper to remineralize sub-surface regions. This combined remineralizing action

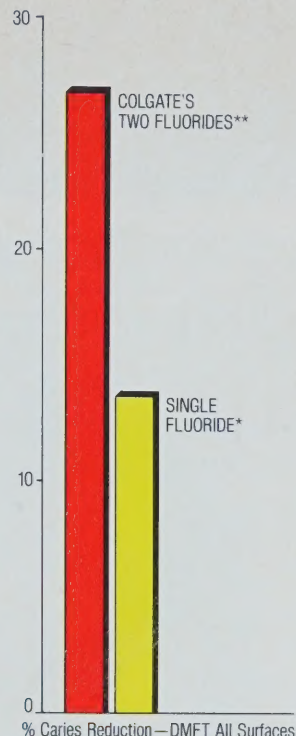
of Colgate's two fluoride formula promotes more complete remineralization of white spot lesions than a single fluoride formulation*.

REMINERALIZATION ACTION OF COLGATE'S TWO FLUORIDES



COLGATE'S CLINICAL PROOF.

The results of a three year clinical study (7) show that Colgate's combination of two fluorides provides significantly greater reduction in caries. In vitro research indicates that this results from more complete remineralization of white spot lesions before they progress to cavities.



IS THIS PART OF YOUR OHI?

We believe that Colgate's two fluoride formula is an innovation in preventive dentistry. By including Colgate in your Oral Hygiene Instruction, you will be recommending cavity protection that you can trust.

REFERENCE

1. Backer-Dirks, O., J. Dent. Res., **45**, 503-511, 1966.
2. Von Der Fehr, F.R. et al, Caries Res., **4**, 131-148, 1970.
3. Levine, R.S., Brit. Dent. J., **138**, 249-253, 1975.
4. Koulourides, T. et al, Ann. N.Y. Acad. Sci., **131**, 771-775, 1965.
5. Silverstone, L.M., Proc. Roy. Soc. Med., **65**, 906, 1972.
6. Colgate-Palmolive, Internal Studies.
7. Hodge, H.C. et al, Brit. Dent. J., **148**, 201-204, 1980.

* Sodium monofluorophosphate (0.76%)

** Sodium monofluorophosphate (0.76%) and sodium fluoride (0.10%)



* "Colgate Toothpaste contains sodium monofluorophosphate and sodium fluoride which are, in our opinion, effective decay preventive agents and are of significant value when used in a conscientiously applied program of oral hygiene and regular professional care."

Canadian Dental Association



PARTNERS IN PREVENTIVE DENTISTRY.

comment

Are The Good Times Gone?



As I write these words, I am sitting on my cottage deck on a warm summer day. The lake is calm and clear, the sun is shining brightly, and the kids are visiting neighbours. What more could one ask in life.

In terms of dental hygiene, the past few years have been warm summer days for us. Though no one could say that things have been perfect, they have been good. How long are these warm summer days going to continue?

Looking at all the indicators, many well documented in Dr. Lewis' 1979 Manpower Study, one would have to see some tough times ahead for dentistry and particularly for dental hygiene. The opportunity to find employment as a dental hygienist may be

greatly curtailed due to a number of somewhat depressing factors.

The reduced demand for dental hygiene services can be divided into two main categories. On the one hand, we have an oversupply of dentists and dental personnel and on the other hand we have an undersupply of demand for dental services.

There is a rapidly increasing number of dentists and dental auxiliaries. Many dentists are now finding themselves less busy than they would like to be resulting in less delegation of duties to auxiliaries and less referrals to specialists. This means that dentists may choose to do themselves what has traditionally been assigned to dental hygienists. The result can be fewer job opportunities, layoffs, or reduced

working hours. This is already the situation across the United States as I discussed covered on a trip to the national meetings of the American Dental Hygienists' Association this past June.

A decreased demand for dental services is a direct result of the current bleak economic situation in Canada. Unemployment, layoffs, salary reductions, shorter working hours, and job sharing are all likely to make dental care a low priority item for many family budgets.

Dental insurance coverage goes by the wayside when jobs are lost. In addition, dental insurance is no longer the plum that it once was so that fewer groups are subscribing. Groups are now considering other forms of compensation in salary negotiations.

Population growth has stabilized thus reducing the influx of new dental patients.

All of this means that we may have to do some adjusting, both as hygienist and as an Association, to cope with changing demands for our services. I see several approaches to relieve this situation that we can use individually and collectively.

- We will have to identify those areas where dental hygienists can be used to their greatest advantage and seek general acceptance to do so.

- We will have to spread the word of preventive dental care to the public in order to maintain and increase the demand for dental services.

- We will have to do what we can to distribute dental hygienists nationally in order to balance supply and demand.

- We will have to co-operate with other members of the dental team, for only through a united effort can we serve the Public and ourselves.

- Most importantly, we will have to stick together. The grim economic situation is a national one and nationally we will have to do what we can to help each other. This means all provinces including Quebec.

I am very optimistic that things will never be as bad as predictions indicate. However, hygienists will have to do some serious thinking about the future in order to keep the warm sunny days around. □

Linda Berry



Members of the Windsor-Essex Dental Hygiene Society package the summer journal for distribution in Canada and in 12 other countries.

Windsor-Essex Society licks 'em and sticks 'em

Did you ever wonder who stuffs your journal in an envelope, slaps on the label, wets and sticks the envelope flap, then stamps on the postage? When you have about 2,500 issues to circulate four times a year, that takes a lot of man-hours or, in our case, hygienist-hours. The Windsor-Essex Dental Hygiene Society has taken on the responsibility of packaging and mailing out your journal for the duration of the time that we publish out of Windsor, Ontario. It takes ten people approximately four hours to complete the task and another hour or two for the Mailing Chairman, Heather Howell, to load the postage meter, recruit the packagers, and deliver the journals to the post office. It isn't totally a labour of love since the CDHA pays the society \$200 per mailing. The society plans

to offer some of the money to Windsor-area hygienists who are having problems meeting their membership fees due to the bleak employment situation in the area. In an '81 ODHA Manpower Survey, Windsor reported a 14% unemployment figure for hygienists.

Correction

The title of the article on page 19 of the 1982 summer issue should read "Eradication" instead of "Irradication". On that same page, column two, second line from the bottom should read "faulty" instead of "faculty".

CFDE comes through with funds for Educator's Workshop

The Canadian Fund for Dental Education has awarded a \$500.00 grant

to the CDHA to assist with expenses of the CDHA sponsored Dental Hygiene Educators Seminar, which was held in Toronto, May 1982. The CDHA appreciates this support extended by the CFDE.

CDHA members rate journal's appeal

Eight out of ten CDHA members read most or all of *The Canadian Dental Hygienist* and 26% of members pass their copy along to others to read as well, according to the first readership study administered during the spring of 1982.

The study, designed to determine readers' preferences about topics for articles, regular features, and design elements, began in early May when a questionnaire was distributed to 100 CDHA members. Three questions designed to draw a demographic profile of CDHA readers were also included. The study drew a 45% response rate which compares favourably with the average rates of return from readership surveys which are between 15 and 25 percent. The data collected from the study has been projected to CDHA's total membership of approximately 2000.

The study shows that readers value their journals by keeping them on file: 60% of CDHA members keep copies of *The Canadian Dental Hygienist* for more than one year; 31% keep copies for six to 12 months; 4.5% keep copies for three to six months; and 4.5% keep copies for up to three months. These findings indicate that *The Canadian Dental Hygienist* has "staying" power.

Asked to rate *The Canadian Dental Hygienist's* performance in a variety of areas, 84% of CDHA members rate the quality of writing as above average, 71% rate range of subjects covered as above average, and 56% rate the journal's applicability to daily practice as above average. In the area of design elements over three-quarters of CDHA members rate the readability/type size of the print and paper used as above average, 56% rate the design and layout above average, 48% rate the covers above average, and 45% rate the photos and illustrations above average.

Readers of *The Canadian Dental Hygienist* indicated that "self-assessment test", "alternatives", and "newsl ine" were the most interesting regu-

Butler

*world's most
complete line
of professional
toothbrushes*



**There's a Butler brush
for every patient's needs!**

Butler® offers more than 20 styles and sizes of toothbrushes. The soft G•U•M® line of brushes includes: Adult 3- and 4-row in nylon or natural, 3-row Youth and Child sizes in nylon, Sulcular, Travel Brush, and two new, compact Adult sizes. All have the no-nonsense straight handle... proven effective for easy manipulation!

Butler special-use brushes include: Proxabrush® system in 2 handles and 6 brush styles, Bass Right-Kind Sub-G®, Orthodontic 3-row nylon, End-Tuft in 2 trim styles, Denture Brush, Bridge & Clasp Brush, and an Interdental Brush.

Butler has a complete line of Preventive Aids, too. All are available for your patients at better drug counters everywhere. Write for catalog and professional price list.

"Your Single Source"

Butler 

John O. Butler Company, 515 Governors Road, Guelph, Ontario, N1K 1C7

To order, call toll-free: 1 800 265-8353 (In B.C.: 112 800 265-8353, In Guelph area: 1 519 837-2500)

lar journal departments followed by "comment" and "abstracts". Readers found the "directory of officials" to be least interesting.

The Canadian Dental Hygienist readers strongly prefer topics for scientific articles dealing with periodontics, dental health education, professional concerns, and emergency procedures. The least favourite topics for articles are oral biology and prevention of dental

caries. The topics in order of preference were:

1. periodontics
2. dental health education; professional concerns
3. emergency procedures
4. paedodontics
5. orthodontics; oral pathology
6. nutrition
7. communications; restorative dentistry
8. geriatric dentistry
9. oral biology
10. prevention of dental caries

The demographic portion of the readership study demonstrated that the majority of CDHA members are female between the ages of 25 and 34 and work in private practice.

Data from the readership study is already being used to plan future issues of *The Canadian Dental Hygienist*. Efforts will be made to improve the quality of photographs, illustrations, and covers, and to publish articles that deal with readers' preferred topics as quickly as possible. The board is considering only publishing the "directory of officials" on an annual basis. □

Twenty Years Ago



The year was 1962 and the *Toronto Daily Star* was promoting dental hygiene as a career for women in this photograph. Bernice Quinn Brown, Director of Dental

Hygiene at the University of Toronto, at that time looks on as part-time clinical staff member, Eleanor McIntyre, demonstrates proper polishing techniques.

self assessment test

Nutrition

1. A recommended shift in the Canadian diet is that:
 - a) We should significantly increase our protein intake.
 - b) We should significantly decrease our protein intake.
 - c) We should increase our intake of complex carbohydrates.
 - d) We should decrease our intake of complex carbohydrates.
2. The Committee on Diet and Cardiovascular Disease has recommended a reduction of total fat in the Canadian diet from ____% to ____% of calories:
 - a) 60% to 50%
 - b) 42% to 35%
 - c) 40% to 20%
 - d) 35% to 30%
3. All persons throughout life have a need for:
 - a) the same amount of nutrients at any age
 - b) the same nutrients but in varying amounts
 - c) the same amount of nutrients in any state of health
 - d) different nutrients in varying amounts
4. Mrs. Elderly, a widow 70 years old, is a new patient. Her address is in an affluent neighbourhood and the quality of her clothing indicates that she has an above-average income, yet she exhibits symptoms of malnutrition. In counselling her about her diet, it is important that the hygienist discover why her diet is apparently inadequate. Which of the following would be the least likely cause?
 - a) Her living and eating alone has resulted in a reduced interest in food
 - b) There is a decreased ability to digest and absorb foods in the elderly
 - c) With age comes a decrease in the senses of taste and smell, resulting in loss of appetite
 - d) Her cooking facilities are inadequate and therefore she is unable to prepare full meals.
5. One nutrient area that is underconsumed by many elderly people is:
 - a) fats and oils
 - b) bread and cereals
 - c) fruits and vegetables
 - d) sugars
 - e) meats and alternates
6. If an infant is thirsty he/she should be given:
 - a) water
 - b) vitaminized apple juice
 - c) skim milk
 - d) formula or breast milk
7. The food additive used to the greatest extent in Canada is:
 - a) nitrite
 - b) sucrose
 - c) iodized salt
 - d) butylated hydroxyanisole
 - e) sodium benzoate
8. Protein and vitamin C are dietary components that are essential in maintaining the integrity of the periodontium because of their role in:
 - a) cell adhesion
 - b) wound healing
 - c) collagen synthesis
 - d) all of the above
9. In the relationship between carbohydrates and caries which of the following factors is least important?
 - a) Quantity of sugar ingested
 - b) Frequency of sugar ingestion
 - c) Physical form of the sugar ingested
 - d) Chemical composition of the sugar ingested
10. Angular Cheilosis is most often associated with a deficiency of:
 - a) thiamine
 - b) ascorbic acid
 - c) riboflavin
 - d) iron
 - e) calcium

Susan Rudin
Teaching Master
George Brown College
Toronto, Ontario

Answers to Self-Assessment Test:

1. (c) 2. (b) 3. (b) 4. (d) 5. (c)
6. (a) 7. (b) 8. (d) 9. (a) 10. (c)

personal finance

Why Would You Buy Common Stock?

By Glendene Sivers

Glendene Sivers has worked in the investment industry and money management area for many years. She is currently a broker in Toronto with McLeod Young Weir Limited. As well, she conducts classes for Nancy Thomson's 8 week course "Investing for Women", which is conducted in major centres across Canada.

New businesses often raise their initial capital by selling common stock or shares. When you purchase a common stock, you are actually buying a part of the company. The share certificate that you receive is in fact proof of such ownership. Any time that you decide you no longer wish to be a shareholder, you can sell your common stock through a broker who passes your order along to a trader on the floor of a stock exchange. Thus, when people talk about the activity of the stock market or equity market, they are generally referring to the purchase and sale of common shares.

When you buy the stock originally, the certificate that shows your ownership can be registered in one of two ways. It can be left in street form which means that the securities are registered in the name of the brokerage firm in order to increase negotiability, or it can be fully registered in your name. Dividend cheques and company reports are sent directly to the name that appears on the stock certificate. Thus, if you leave your shares with the investment dealer in safekeeping, the firm will receive the dividend on your behalf and credit your account accordingly. They, in turn, can send you out your cheque directly.

If the company whose common shares you have purchased has a profitable year, they can do one of two things: use such excess to further develop the company (and a young, expanding company may well do this) or the Board of Directors can vote to pay a dividend to you, the shareholder. Because you are a partial owner of the company, you are entitled to share in the profits.

In order to encourage you as

Canadians to provide the necessary funding to growth-oriented companies in Canada, the Government offers investors two key tax advantages regarding the dividends you receive.

- You are allowed \$1,000 tax free income from investments whether this income is derived from stock or bonds or a combination of both.
- The Canadian Dividend Tax Credit allows you to retain up to 50% more of the income you receive from dividends as opposed to interest income. (i.e. A person with taxable income of \$20,016 to \$31,136 would retain \$94.82 of every \$100 in dividends received compared to only \$63.00 of every \$100 interest.)

Common stocks fluctuate in price much more widely than do preferred shares or bonds. A take-over rumour or possible merger talks will drive up the price of a common stock on speculation. If a company announces higher earnings and perhaps an increase in the rate of dividend they pay their shareholders, this will also cause a stock price to move upwards. Another factor affecting common share prices is the public's income. The more money available to spend on consumer products, the greater the cash flow back to the company. Increases in taxes reduce corporate profits and the net incomes of taxpayers; thus, tax increases are bearish (negative) and tax decreases are bullish (positive) for the stock market. Finally, investor psychology (i.e. whether the majority of investors feel optimistic or pessimistic, bullish or bearish, towards the market) can create wide swings in the price of a common stock without there being any fundamental change in the company's earnings outlook.

As a company's earnings grow and dividends increase, the market price of its common shares frequently rises substantially. Often when share prices do rise dramatically, there are less investors willing to buy the stock. Thus, in order to encourage more people to buy their shares, a company will often an-

nounce a stock split. For example, if a stock splits "two for one", that means that for every 100 shares you presently hold, you will be sent a stock certificate for an additional 100 shares. Therefore, you will then hold 200 shares for every 100 you held before.

The negative aspect of a stock split is that you generally pay a slightly higher rate of commission on lower priced stocks when you buy or sell your shares. The positive side is that a stock split is generally considered bullish or positive for the company and the stock usually trades up somewhat.

Why would you consider the purchase of a common stock? What would be your investment objectives?

To answer these two questions I would suggest that you might be looking for dividend income and/or capital appreciation. Some young companies are not able to pay dividends immediately, but do offer good growth prospects. By purchasing common shares of such a company, you would hope to achieve capital appreciation. You might also consider a well established blue-chip company that has an excellent earnings record and past history of stable dividend payments. This type of company you would be buying primarily for dividend income and for perhaps a little less capital gains, although some companies can offer you both. This particularly happens when the stock market has been depressed (as it has recently) whereby you can buy blue-chip stocks, with their accompanying strong dividend payments, that are trading at unusually low values. As our economy strengthens, the common stock market turns upwards, and then too will your profits from quality companies in the form of capital gains.

I would welcome any questions from readers and would be happy to send out a further printed explanation on the Dividend Tax Credit as it applies to common stocks. Glendene Sivers, McLeod, Young, Weir Limited, 5075 Yonge Street, Willowdale, Ontario M2N 6C6 - or Telephone (416) 226-9505. □

Factors Influencing Dental Health Education for the Aged

Barbara Zier, Dip. D.Hyg., B.Ed., M.Ed.

Preventive measures for the aged including dental health education assume greater importance as the number of people involved in this group steadily increase. Concomitantly, it has been demonstrated^{1, 2} that dental hygienists, other health professionals, and many of the general public are often frightened by the thought of working with the elderly.

The purpose of this paper is to briefly: 1) review background information prerequisite to dental health education program planning for the aged and 2) describe an interdisciplinary approach to dental health education which involves the aged, dental personnel and other health professionals.

Increasing Numbers of Aged

The Statistics Canada Postcensal Estimate of the Population by Sex and Age, Canada and Provinces, June 1, 1980³ listed 2,281,800 persons in the 65 plus age group in Canada. This figure represents ten percent of the total Canadian population. Forecasts⁴ indicate that adults and particularly the elderly will be an increasing proportion of the total population. Banting⁵ states that the number of persons 65 plus in Canada is expected to exceed three million by 1991. Table 1 delineates population numbers and percentages in the 65 plus age group by province.

TABLE I
65+ AGE GROUP BY PROVINCE, 1980

<u>PROVINCE</u>	<u>POPULATION</u> (in thousands)	<u>% OF PROV.</u> <u>POPULATION</u>
Nfld.	42.8	7
P.E.I.	14.4	12
N.S.	90.4	11
N.B.	68.6	10
Que.	47.7	8
Ont.	841.0	10
Man.	118.6	12
Sask.	113.8	12
Alta.	159.8	8
B.C.	282.3	11
Yuk.	0.8	4
N.W.T.	1.5	3
All Canada	2,281.8	

Source: Statistics Canada, Table 6, Postcensal Estimate of the Population by Sex and Age, Canada and Provinces, June 1, 1980.

Background Information

The term aged is a concept which fixes the individual at a point in his life, usually age 65. This arbitrary age is used, not because of an actual change that takes place in the individual, but because it has become the usual age of 'retirement' in our society. One must be wary of the notion that once a person reaches the age of 65, he or she suddenly becomes part of a homogeneous population which requires special treatment. Such

stereotyping can result in inflexible and static approaches to dental health education techniques. In an effort to discount the myths about aging, the American National Institute on Aging⁶ provides us with the following facts: 70 to 75 percent of people over 65 are intellectually and socially able, mentally vigorous, and interested in life around them. Twenty-two percent of men over 65 continue to work. Twenty-five percent of those over 65 live alone. Seventeen percent of people over 65 cannot fully care for themselves. Fifteen percent of the elderly have mental disorders. Of the population in the 65 plus age group, approximately five to six percent are in institutions, such as nursing homes and auxiliary hospitals.^{6, 7} Of the approximately 95 percent that live in the community, almost 70 percent are located in urban areas.⁷ While there is not a comparable Institute in Canada, Dr. David Skelton,⁸ a geriatrician and pathologist at the University of Alberta and Chief of Staff at the Youville Memorial Hospital, Edmonton, confirmed that only five percent of the aged need some sort of institutional care; 15 to 20 percent need some degree of community support, such as day care or home care. Seventy-five to 80 percent are not only able to cope, but potentially have the opportunity for a full and involved life. Of those 65 and over in Canada, 10% are in institutions. Of those 70 and older, 9% are in institutional care.

Numerous studies⁹⁻¹⁶ demonstrate that dental needs among the aged are great. "Older people tend to be written off insofar as dental health care is involved, even including prophylactic care. By the time geriatricians see older people, their teeth are gone. The question is where to intensify efforts — through crisis care in older age or in the delivery of intensive preventive measures in middle and young age. It seems clear that preventive care is indicated and greatly needed, and that the dental care for older persons still remains a focus of concern."¹⁷

References can be consulted on the oral changes,^{7, 18} and the physiological^{7, 18-26} and psychological^{27, 28} characteristics of the aged.

An In-Service Education Approach

Program planning for the elderly has two foci: for that population group that has been institutionalized and for those residing in

the community. Within these groups, individuals can be placed on a continuum of being totally independent to totally dependent for their daily dental hygiene care. Upon examining the population numbers, it soon becomes evident that dental manpower alone is not sufficient to undertake all the needed dental health education programming. What is required is an interdisciplinary approach involving other health professionals in the delivery of dental hygiene care to the aged. In-service educational programs become a very important component of a program. The in-service format that is developed can be basically the same for both institutional and community health personnel. The in-service program should have two parts. It should prepare health professionals to: 1) educate and supervise self-care patients to care for their own oral health; and 2) provide oral hygiene care to dependent patients. Ideally the program should provide dental health education for all parties including administrators, nursing personnel, the elderly, and their families. There should be provision for periodic examination, with consideration for access to necessary treatment, and continuing attention to daily oral hygiene measures.

The major obstacle to program organization is the task of convincing those responsible for the care of the aged of the value of dental health for the elderly. They must be informed that food and chewing and tasting become an increasingly important source of pleasure and emotional satisfaction for the elderly; that, although dental care does not necessarily improve or reverse existing medical disorders, it can minimize many aggravating oral symptoms caused by disease or its treatment such as dry mouth, drooling, odour, and pain from bacterial and fungal infections that cause the elderly physical pain and social distress. When an individual's physical appearance can determine his degree of social integration, when a sense of purpose and belonging is significant to total health, when psychological benefits such as maintenance of self-esteem, dignity, and security can be directly attributable to dental health, dental function and aesthetics assumes increased importance for the elderly.

In-Service Topics

The following is a list of topics which a dental hygienist may use in an in-service presentation.

- the normal changes in oral tissues that accompany aging.
- common oral disorders
- the nature of plaque and its effects
- demonstration of toothbrushing including toothbrush selection and storage
- dental flossing techniques
- dentifrices
- mouthwashes
- diet and its relation to dental health
- denture cleaning and storage
- denture identification
- denture removal for the difficult patient
- use of proprietary products to aid denture wearing
- procedures for instructing and supervising self-care patients
- demonstration of oral hygiene procedures to be performed for dependent elderly
- fluorides
- medications and their effect on oral health
- oral cancer

- sources of dental supplies
- cost cutting procedures ie. homemade dentifrices, mouthwashes
- treatment and financial assistance programs available to elderly

There are many references for ideas and approaches to dental health education for the aged.^{2, 7, 19, 20, 29-32} Participation of the elderly in the teaching process is particularly valuable; doing as opposed to seeing and seeing as opposed to hearing will help make teaching more effective. Individual (person to person) communication is usually the most effective method for changing behavior; although expensive in terms of staff time. Group teaching and group discussion is the next best method.²¹ Repetition is important. The American Dental Association's manual *Oral Health Care For Geriatric Patients in a Long Term Care Facility*³³ outlines a step by step procedure for instituting a comprehensive dental health care program. The audio-

Hygienists are instrumental in starting in-service programs for health professionals who care for both the institutionalized and non-institutionalized elderly. Before beginning a program, a hygienist must examine her/his own attitudes about aging.



visual resources "Dentistry for the Geriatric Patient,"³⁴ "Senior Smile,"³⁵ and "Oral Care for the Geriatric Patient,"³⁶ might be considered as a basis for an in-service program.

Conclusion

The elderly make up a continually increasing proportion of our society. As the number of aged persons increase, a greater need for oral health care of the elderly will develop. To maximize delivery of care to this population group, an interdisciplinary approach to dental health education is recommended. Other health professionals can be involved in educating and supervising self care geriatrics to care for their own oral health and can provide daily care to dependent patients. In-service programs should be developed for this purpose. However, before dental personnel undertake this sort of program planning, they should take time to examine their assumptions and attitudes about aging and old age as well as to review the physiological, oral, and psychological characteristics associated with the aging process. □

References

1. Bishop, L. A study of dental hygienists' attitudes towards working with elderly patients. *Dent. Hyg.* 53(3):125-127, 1979.
2. Fishman, N. and N. Gordon. Don't they all wear dentures? *J. Mass. Dent. Soc.* 25:32-33, 1976.
3. Statistics Canada. Postcensal Estimate of the Population by Sex and Age, Canada and Provinces, June, 1980.
4. Seastone, D. Economic and demographic futures in education: Alberta, 1970-2005. Paper commissioned by The Human Resources Research Council and Commission on Educational Planning.
5. Banting, W. Dental care for the aged. *Can. J. Pub. Health* 62:503-508, 1971.
6. United States National Institute on Aging. Facts of Aging. Dept. of Health, Education and Welfare. Public Health Service. National Institutes of Health. Bethesda, Maryland 20014.
7. Wilkins, E. M. Clinical Practice of the Dental Hygienist. Lea and Febiger, Philadelphia, 1976, 587-595.
8. Skelton, D. The Physiology of Aging. Edmonton, October 5, 1980.
9. Banting, E. Dental care in the long-term hospitals. *Can. Hosp.*, November, 49-51, 1973.
10. Booth, H. and D. Leverett. Dental health and dental care in nursing homes in Munroe County, New York, New York State D. J. 42: August-September, 1976.
11. Ettinger, R. L. and R. D. Manderson. Dental care of the elderly. *Nursing Times*, June 26, 1003-1006, 1975.
12. Lightman, I. et al. Denture needs of a group of Toronto aged. *J. Canad. Dental Assoc.* 35:40, 1969.
13. McPhail, C. W. B. et al. Dental health and treatment needs of patients in a hospital for the chronically ill. *J. Canad. Dental Assoc.* 36:195, 1970.
14. Martinello, B. P. and J. L. Leake. Oral health status in the three London, Ontario homes for the aged. *J. Canad. Dent. Assoc.* 37:429, 1971.
15. Rise, J. and L. Heloe. Oral conditions and need for dental treatment in an elderly population in Northern Norway. *Community Dent. Oral Epidemiol* 6:6-11, 1978.
16. Smith, M. and A. Sheiham. How dental conditions handicap the elderly. *Community Dent. Oral Epidemiol* 7:305-310, 1979.
17. Eisdorfer, C. Issues in health planning for the aged. *Gerontologist* 16(1):15, 1976.
18. American Dental Hygienists' Association. Dental Hygiene Care for the Geriatric Patient, 1980.
19. Ettinger, R.; Beck, J. D. and R. E. Gleen. Eliminating office architectural barriers to dental care of the elderly and handicapped. *J.A.D.A.* 98: March, 398-401, 1979.
20. Friedman, J. W. Dentistry in the geriatric patient: mutilation by consensus. *Geriatrics* 23:98, 1968.
21. Gillet, J. A. Health education of the elderly. *Community Health.* 4:254-260, 1973.
22. Bronner, F. Dental aspects of old age. *J. Amer. Soc. Geriatric Dent.* 13:14, Autumn, 1977.
23. Chauncey, H. H., and J. E. House. Dental problems in the elderly. *Hosp. Pract.* 81:86, December, 1977.
24. Cooke, B. E. Oral problems in the elderly. *Geront. Clin.* 13:359-367, 1971.
25. Kaplan, H. The oral cavity in geriatrics. *Geriatrics*, December, 96-102, 1971.
26. Silberman, H. A. An introduction to geriatric dentistry. *J.N.J. Dent. Assoc.* 46:20-21, Fall, 1974.
27. Butler, R. N., and Lewis, I. Aging and Mental Health. St. Louis: C. V. Mosby, 1973.
28. Botwinick, J. Aging and Behavior. Springer, 1973.
29. Busse, G. and R. Simpson. Dentistry and nursing work together to improve care of the aged. *J. Gerontol Nurs.* 6(5):280-283, May, 1980.
30. Crockett, K. E. In-Service training for employees of nursing homes. *J. Missouri Dent. Assoc.* 57:23-43, 1977.
31. Kamen, S. A prototype service for nursing homes. *J. Hosp. Dent. Pract.* 10:67-68, 1976.
32. Yates, G. Dental care for the geriatric patient. A pilot program of education service. *Baylor Dent. J.* 17:22-27, 1969.
33. American Dental Association. Council of Dental Health and Health Planning. Oral Health Care of the Geriatric Patient In a Long-Term Care Facility. An Educational Program. American Dental Association, 211 East Chicago Avenue, Chicago, Illinois, 60611.
34. Bureau of Health Education and Audiovisual Services. "Dentistry for the Geriatric Patient" (SL-94) American Dental Association (211 East Chicago Avenue, Chicago, Illinois, 60611).
35. Bureau of Health Education and Audiovisual Services. "Senior Smile" (DHBIII) American Dental Association (address above).
36. Tri-County Dental Health Council. "Oral Care for the Geriatric Patient" 16310 West 12 Mile Road, Suite 310, Southfield, Michigan 48076.

About the author: Barbara Zier is the chairperson of the Division of Dental Hygiene at the Faculty of Dentistry, University of Alberta.

Characteristics of Dental Hygiene Positions in Canada, 1979, Part 1

D. W. Lewis, D.D.S., D.D.P.H., M.Sc.D., F.R.C.D.(C)

Tamara Krievins, R.D.H., B.Sc.D.

In a previous article the educational, demographic, professional and employment characteristics of dental hygienists based on a 1979 survey of Canadian hygienists was reported.¹ The survey found that about 2300 or 82% of the respondents were actively employed as dental hygienists in some 2700 different dental hygiene positions. In this and subsequent articles in this series, various characteristics of these positions will be described; therefore, the dental hygiene position not the hygienist is the unit of analysis. Although it is important at the outset to note this so that the reader will know that 2700 different positions not hygienists are being described, the distinction is somewhat academic since the vast majority (81.5%) of Canadian dental hygienists work in only one position.

The different types of dental hygiene positions, their duration and characteristics, and respondents' perceptions of the quality of their preparatory hygiene education for them, as well as the number of patient visits experienced, are presented here. In later articles the compensation and fringe benefits received, and type and frequency of duties performed will be described. To conserve space, the findings from each province, which often differ from the aggregated national figures,

will not usually be presented; however, these data are available directly from the authors.

Types And Related Characteristics Of The Dental Hygiene Positions

In what types of dental hygiene positions were Canadian dental hygienists employed in the late 1979? As Table 1 shows, nearly 84% were employed in private practice (72% in general, 8% in specialty and 4% in combined general and specialty practice). One-half of the positions in specialty practice were in periodontics and nearly one-third were in orthodontics. The finding that most Canadian dental hygiene positions are in the private sector, especially in general practice, is hardly surprising. What is interesting though is that one out of every six dental hygiene positions (16.5%) is in public practice, mostly public health (9%) and post-secondary education (5%).

Table 1 also gives the estimated percent of time in which patients are treated for each position type. Some very noticeable differences between private and public practice emerge. Although nearly all the time in the private practice positions is spent in patient care, much less time (54%) is spent on patient care in public practice, especially in public health (65%) and, understandably, in post-secondary education (12%).

Table 1

Distribution of Dental Hygiene Positions in Canada and the percent in which patients are treated by practice type.

Type of Hygiene Practice	N Positions	Relative Percent %	Percent Treating Patients %
General Practice	1933	71.5	99.7
Specialty Practice	219	8.1	99.6
Periodontics	108	4.0	
Orthodontics	68	2.5	
Paedodontics	35	1.3	
Oral Surgery, Endo., Prosth.	8	0.3	
G.P. & Specialty	103	3.8	99.0
GP + Prosth.	25	0.9	
GP + Ortho.	21	0.8	
GP + Perio.	19	0.7	
GP + Cr. Br.	15	0.6	
GP + Anaesth., Endo., Paedo., Surg., Other(s)	23	0.9	
(Subtotal-Priv. Pract.)	(2255)	(83.5)	(99.6)
Public Health	234	8.6	65.1
Post-secondary Education	137	5.1	11.7
School Clinic	23	0.9	39.1
Hospital Clinic	20	0.7	100.0
Military Clinic	8	0.3	100.0
Other(s)	25	0.9	68.0
(Subtotal-Publ. Pract.)	(477)	(16.5)	(54.2)
TOTALS	2702		91.4

Although not tabled here, it may be of interest to note that the respondents reported that 74% of their hygiene positions were located in the same county and town/city in which they resided. Nearly 14% of the positions were in a different town/city and 12% in a different county from where the hygienist lived. No information on the extent of travel required to reach these out-of-residence dental hygiene positions is available. Although in many instances these distances will be very small, it would be important in future studies to determine this, since one-quarter of the positions reported a geographic discrepancy between position and residency.

As reported in a previous article¹, nearly 80% of dental hygienists had changed jobs once or not at all in the last three years. Consistent with this in respect to positions, the mean length of time respondents indicated they had been continuously employed in their present positions (up to the end of December 1979) was 31 months. The median length of time per position was much lower, 20 months. Consideration of any such data, however, must allow for the fact that over half of Canada's dental hygienists (59%) at the time of the survey had graduated in the past five years.

Another aspect of the dental hygiene positions revealed by the survey concerned the

extent of and the compensation for overtime work. In 10% of the positions, overtime work was regularly performed and, in 50%, it was occasionally required. Since about 60% of the positions involved overtime work, it was interesting to find that for nearly 60% of these positions, respondents stated that there was no extra compensation allowed! For the remaining 40% of positions involving overtime, 15% were paid extra at the usual rate, 5% at a higher rate, and 20% received additional time off as compensation.

Quality of Dental Hygiene Education as Good Preparation for Present Positions

Respondents claimed that, for 79% of their hygiene positions, their hygiene education was good preparation. Just over 7% were equivocal, stating "yes and no", regarding the quality of the preparation and just over 13% felt their dental hygiene education did not provide good preparation for the dental hygiene positions they now held. The percent stating not good preparation was lowest in Manitoba (5%) and highest in Quebec (23%) with the percents in the remaining provinces being close to the national mean of 13%.

Since, for two-thirds of the positions, respondents with a definite "yes" or "no" as to the quality of their educational preparation for their present positions had provided reasons for their response, this question was analyzed further. Of those stating "yes", most (53%) gave the comprehensiveness of the training they had received as their primary reason, while just over one-quarter (26%) claimed "good clinical training" as their primary reason. Of those stating "no", nearly one-quarter (23%) believed their training was not specific enough, while just slightly fewer (22%) claimed their training was not practical enough for their present positions. Ironically, in view of the high number citing comprehensiveness as support for the suitability of their training programs, 16% of those who were not satisfied with the preparation of their programs cited its lack of comprehensiveness as their primary reason. These findings, however, are for all types of Canadian dental hygiene positions combined. What emerges when individual employment categories are examined separately?

Perceptions of the job preparatory quality of dental hygiene education varied according to the type of dental hygiene position being considered. Thus, nearly 42% of those in public practice positions, for which a definite response and reason were obtained, thought their training was not good preparation; whereas, for private practice positions, this was lower (24%). In public practice positions, this "negative" percent was higher for public health positions (50%) than for post-secondary education positions (33%). In private practice positions this "negative" percent was higher for dental specialty positions (48%) than for general practice positions (21%). Some differences in the reasons for citing "yes" or "no" according to position type also were found.

Respondents with general practice positions cited "good clinical training" more often (29%) as their primary reason for claiming their training was good preparation than did those in other private (specialty) and public practice positions (about 20%). Those in private specialty practice and public health positions who felt that their training was not good preparation most often cited a lack of specificity in their training as the main reason (47% and 30%, respectively). Those in private general practice positions who were dissatisfied with the job preparation of their training most often claimed its lack of practicality as their primary reason (32%).

In interpreting these findings it is well to remember that as pointed out at the beginning of this section, respondents stated that their educational preparation was good for 79% and unsatisfactory for just 13% of the positions they held in 1979.

Staff and Equipment Characteristics of the Dental Hygiene Positions

In the average dental hygiene position there were 4.25 other staff besides dental hygienists. The median number of other staff was 3.67. Most of these staff were dentists, dental assistants, and receptionist-secretaries (means of 1.3, 1.6 and 1.0 per dental hygienist position, respectively). In 40% of the dental hygiene positions, there was at least one other hygienist besides the one reporting. Because of its implications on productivity, the extent to which chairside assistance was available in the positions treating patients was of interest. Apparently just

10% of the dental hygiene positions regularly utilized a chairside assistant for the hygienist; just over 34% of positions utilized an assistant occasionally, and 55% never had one available.

The equipment in about 86% of the dental hygiene positions was perceived by respondents to be modern. In an identical number of positions (86%), an ultrasonic scaler was available, but fewer (63%) had an automatic developer for radiographs. In nearly 82% of the positions, the dental hygienist always used the same operatory.

Patient Visits in the Dental Hygiene Positions

By using information provided by respondents in the various dental hygiene positions in which patients are treated (Table 1), it was possible to estimate the number of patients seen per hour of patient care.* The use of such an index gets around the complications created by part-time work and by variations in "down" or non-productive practice time. Table 2 gives the mean and median numbers of patients seen per patient hour provincially and nationally. For Canada it is estimated that there were 1.72 patient visits per patient hour, on average, for each dental hygiene position. The mean number of patient visits per patient hour was highest in New Brunswick (2.22)

Table 2

Mean and median numbers of patient visits per hour working with patients for Canadian Dental Hygiene positions by province.

Province	Patients Per Patient Hour		N Positions*
	Mean	Median	
Newfoundland	1.95	1.83	10
Prince Edward Island	1.80	1.24	12
Nova Scotia	1.55	1.43	78
New Brunswick	2.22	1.72	32
Quebec	1.65	1.45	297
Ontario	1.85	1.60	1219
Manitoba	1.29	1.25	97
Saskatchewan	1.47	1.48	27
Alberta	1.50	1.25	236
British Columbia	1.47	1.09	279
Yukon & N.W. Terr.	—	—	2
CANADA	1.72	1.44	2291

* Dental hygiene positions in which patients are treated.
—Sample size is too small for proper calculation.

* Since some dental hygienists reported that they treated patients for only part of their practice time, the calculation described by the term "patients per patient hour" used in the text and Tables 2 and 3 permitted fairer comparisons of productivity among hygienists.

and lowest in Manitoba (1.29). Although details on the types of duties hygienists perform will be provided in a subsequent article, no information is available as to the content of the services provided at each patient visit. Therefore it is not known whether these apparent differences in patient flow also represent variations in the services rendered at each patient visit.

The data in Table 2 consist of all types of dental hygiene positions combined. This could mask differences in productivity as measured in terms of patients seen per patient hour. Table 3 examines whether such variations exist according to five selected characteristics of the dental hygienists and their positions. It should be mentioned that, with several other characteristics examined, no obvious trends towards regularly increasing or decreasing mean patient visits were observed. These other charac-

teristics included the number of current workplaces and estimated income per hour.

As seen in Table 3, dental hygiene positions in private specialty practice (2.17) and public health (2.67) displayed the highest mean patient visits per patient hour. In private general practice positions where the vast majority of dental hygienists work, the mean number of patients was 1.63 per patient hour. The mean visit pattern according to year of dental hygiene graduation, a proxy for age, is interesting. The number of visits rose from a low point of 1.57 with the most recent 1979 graduates to a peak of 1.87 with the 1976 graduates, then declined through the next two age groups, only to rise slightly to 1.74 in the 1951-59 graduation group.

In hygiene positions in which a dental chairside assistant was used regularly, there was about a 60% greater mean number of patients seen per hour (2.59) than when an assistant was used occasionally (1.61) or never (1.64). Table 3 also revealed that as satisfaction of dental hygienists with their careers regularly increased so did the mean number of patient visits per hour, from 1.50 visits for positions in which the hygienists were very dissatisfied to 1.72 visits for positions in which the hygienists were very satisfied. Looking at another characteristic, it appears that as the hours worked per week increased, the mean number of patient visits per hour also increased; thus, hygienists working one day or less per week saw 1.63 patients per hour, whereas those working five or more days per week saw 1.79 patients per hour.

As the preceding analysis demonstrates, variations in the mean number of patient visits per patient hour occur not only provincially but also when a number of other characteristics are considered. It must be stressed, however, that a more detailed analysis to account for the simultaneous effects of a number of characteristics is required for a proper explanation of the reasons behind these patient visit differences. Taking one explanatory variable at a time as done here for descriptive analysis is too simplistic for this purpose.

Discussion

The types of dental hygiene positions in Canada in late 1979 were characterized by

Table 3

Patient visits per patient hour by hygienist and dental hygiene position characteristics.

CHARACTERISTIC	Mean No. Patients per 'Patient' Hr.	N Positions
Employment Category		
General Practice	1.63	1816
Specialty Practice	2.17	200
G.P. & Specialty	1.57	86
Public Health	2.67	110
Post-sec. Educ.	1.08	15
School Clinic	1.55	8
Hospital Clinic	1.29	16
Military & Other	1.55	32
Year of Dental Hygiene Graduation		
<1951	—	(4)
1951-1959	1.74	31
1960-1969	1.63	302
1970-1975	1.80	580
1976	1.87	249
1977	1.77	422
1978	1.62	389
1979	1.57	303
Chairside Assistant Available		
Regularly	2.59	198
Occasionally	1.61	719
Never	1.64	1168
Satisfaction With D.H. Career		
Very satisfied	1.72	1043
Somewhat satisfied	1.67	794
Somewhat dissatisfied	1.65	248
Very dissatisfied	1.50	42
Hours Worked Per Week		
8 & less	1.63	228
9-16	1.66	429
17-24	1.71	305
25-34	1.71	584
35 & over	1.79	714

their diversity. The largest group of positions (72%) was, understandably, in private general practice. The second largest group was in dental public health (8.6%), followed closely by private specialty positions (8.1%) and post-secondary education (5.1%). A wide variety of positions and general-specialty combinations made up the remainder of the types of dental hygiene jobs. This diversity, as well as the fact that in some of the numerous public positions patients are not treated directly, makes a consideration of the preparatory quality of the dental hygienists' education interesting.

On the positive side, for 79% of their positions, respondents thought their preparatory education was good. About 7% were indefinite, answering "yes and no". Respondents in about 13% of the positions felt their training was not good mainly due to its lack of specificity and practicality. Because of the orientation of dental hygiene training, it was not surprising to find that 42% of those in public practice positions with definite "yes or no" opinions described their preparatory education negatively. However, it was somewhat surprising to find 24% of those in private practice with definite opinions being similarly negative. As it turned out, much of this private practice disenchantment arose from those in specialty dental positions (48%); nevertheless, one in five in general practice was similarly inclined.

The impression that dental hygienists are generally hired into larger, well-equipped practices was born out by the survey. The equipment in most positions was perceived by respondents to be modern. The hygienists worked in positions with just over four other staff, on average, besides hygienists. In two of every five positions, there was at least one other hygienist employed, although the survey did not determine whether this employment occurred at the same time as the respondent worked (some double counting was also possible).

Since in the dental hygiene positions in which chairside assistants were regularly used the number of patients seen per hour was nearly 60% greater, it was interesting to note that only 10% of positions regularly utilized a chairside assistant. In the typical dental hygiene position in Canada, 1.7 patients are seen each hour. New graduates in

the three years preceding the survey tended to see the fewest patients per hour. Although there was a drop off in the patients seen per hour in positions occupied by the oldest graduates, the decline was very slight indeed. Hygienists working in specialty positions and in public health see more patients per hour than those in general practice positions. This finding would seem to coincide with one's general understanding of the nature of these different forms of practice. In the vast majority of post-secondary positions, patients, again understandably, were not seen at all.

Although the particular dimension(s) of satisfaction measured by the survey was unclear, it was nevertheless interesting to note that there was a regular decline in patients seen per hour as the level of career satisfaction decreased.

It was not encouraging to find that in the 60% of all dental hygiene positions involving overtime, no extra compensation of any kind was arranged in just over one-half of these positions. Since compensation and fringe benefits are the subject of the next article in this series, let's wait until then to see if this is a bad omen.

Acknowledgment

We gratefully acknowledge the financial help of the Canadian Dental Hygienists' Association which permitted us to continue the analysis begun under our original support from the Ontario Ministry of Health grant DM381. □

References

1. Lewis, D.W., Educational, demographic, professional and employment characteristics of dental hygienists in Canada, 1979. *The Can. Dent. Hyg.* Vol. 16, No. 3: 82-88 1982.

alternatives

Teaching Master, Dental Auxiliary Program in an Ontario Community College

Louise Chochla, R.D.H., B.Sc.D.

As a 1975 graduate of the University of Toronto's dental hygiene diploma program, I became aware that my class would be one of the last to receive training at this institution. Rapid changes were taking place. After 1977 all Ontario dental hygienists would be educated in 11 community colleges scattered throughout the province.

My feeling was that the need for dental auxiliary educators was certain to exist. Therefore, after two years of full-time practical experience as a dental hygienist, I enrolled in the Bachelor of Science in Dentistry program at U of T which, although not solely geared towards training hygienists to become dental auxiliary educators within the Ontario college system, the program did offer this option and it became the goal I set for myself.

As a full-time college teacher for the past three years, I have been involved in dental auxiliary programs that train both dental assistants and dental hygienists. Each course is one academic year long, with successful completion of the dental assisting program being a prerequisite for entrance into the dental hygiene program.

My teaching responsibilities last year consisted of the following:

PROGRAM

SEMESTER 1

(September until December 1981)

Dental Hygiene

- Oral Histology & Embryology
- Dental Health Education
- Nutritional Counselling
- Preclinical and Clinical Demonstrator

Dental Assistant

- Preclinical and Clinical Demonstrator

SEMESTER 2

(January until May 1982)

Dental Hygiene

- Dental Health
- Education Field Work
- Clinical Demonstrator
- Nutritional Counselling
- Practical

Dental Assistant

- Nutrition
- Preclinical and Clinical Demonstrator

Although the above is a list of my basic teaching load, a college teacher's job is not limited exclusively to the areas s/he is assigned to instruct. Other duties include marking papers, student counselling, curriculum review, developing evaluation tools, developing audio-visual aids, attending various meetings, writing student references, attending professional development sessions, and working with students on special projects such as constructing table clinics for conventions, and preparing presentations for special groups.

Teaching is always challenging and there is NEVER a dull moment. I enjoy the daily interaction with staff members involved in the dental program as well as with those who teach in other areas of the college.

There is a certain amount of flexibility in a teaching master's work schedule. Teaching is not a strict nine to five job, and most individuals can choose their most productive time of the day to prepare for their classes.

This flexibility is a positive aspect of the job; however, most teachers find that they work a lot more than 40 hours a week. Some individuals might find this stressful, but I enjoy the fact that every day my timetable is a little different and I can rearrange my work schedule around my classes.

...alternatives

I also like having the opportunity to be a bit creative. There are many teaching strategies that can be employed to get the message across to your students effectively. With a little imagination, you never have to teach a given topic the same way twice.

A teacher must remain current. New research findings are constantly published, and it is easy to fall behind in your subject if you don't make time for reading and attending continuing education courses. As a college instructor, I have many professional development opportunities to help further my education and keep me current.

The Ontario college system offers excellent benefits to its employees. A new teacher is on probation for one year, but still receives full benefits during this time. Job security is fairly good once the year's probation period is over. Probation is not transferrable between colleges.

There can be some frustrations involved in teaching. College instructors may find that, since they are working in a large institution, they encounter a lot of red tape. At times it feels as if you are spending more time dealing with administrative functions than teaching.

Some individuals may experience greater stress in teaching than in working in private practice, as you usually take your work home with you. Teachers tend to be actively involved in their jobs for longer periods of the day. Also, you are never guaranteed that you will teach the same subject each year which means you are constantly researching new subject materials preparing lectures from scratch, and developing new evaluation tools. It can be frustrating when you are given a new subject to teach instead of the opportunity to build on the knowledge and materials you have compiled from the previous year.

If you undertake a teaching position at an Ontario community college, there are a number of items I would suggest you consider.

- Do not be afraid to enlist the help of others who have been teaching longer than yourself. It is not a bad idea to develop a mentor – someone to guide you along your way.

Most people are only too glad to help a newcomer. When every faculty member knows how to do his or her job well, it is easier for the whole staff.

- Do not be too hard on yourself. It takes time to become a good teacher.

- Without excellent feedback, it is difficult to improve. From my experience, students give the most objective and constructive advice about how to improve the classroom instruction. Although this prospect may seem threatening, I suggest you seek student feedback. Find out how the people you instruct feel about your class.

- Be sure you are evaluated properly by the person responsible for this task. His/her feedback is important. If you request your evaluations in writing, this gives you a personal record of your progress as a teacher. Positive feedback can serve as a recommendation for a permanent staff position after your year of probation. Negative feedback can serve as an impetus for improving your teaching methods. When you are on probation, do not assume that no news is good news. Get evaluated!

- You should receive or request a copy of the college contract when you join the faculty. Be sure you read and understand the contract in order to know your rights as an employee.

- Communication skills, both written and spoken, are valuable. In your years as a budding teacher, these skills should be developed and polished. Usually the best way is by listening to those more experienced than yourself. Sit back and let the pieces of the puzzle fit together.

- When you communicate verbally with other faculty, it is a good idea to clarify important points in writing. If you do this, you are guaranteed that both parties understand the decision or agreement.

I hope that I have given you some insight into teaching dental auxiliaries in a community college setting.

In spite of all the time and effort inherent in a career as a teaching master, I can not think of a more satisfying alternative profession to be a part of. □

Herpes simplex virus as an occupational hazard

Transmission of herpes simplex virus infection can occur via direct contact with oral, herpetic lesions or oral secretions containing virus, aerosols, or fomites such as dental instruments, handpieces, and impressions. It is an occupational hazard for dentists, hygienists, and assistants. Additionally, two other infections are of particular concern to dental personnel: ocular infection and herpetic whitlow.

Ocular infection with herpes simplex virus carries with it the potential for permanent visual impairment, and prompt treatment is required. The primary infection produces keratitis, which is often accompanied by conjunctivitis and enlargement of the preauricular nodes. Recurrent ocular herpetic infections occur in 25% to 33% of patients within two years and carry the risk of deep stromal involvement with gradual diminution of visual acuity.

Infection of the fingers after contact with herpes simplex virus is herpetic whitlow, first reported in 1909. Although numerous cases have been reported in the past 20 years, the majority involves nurses or personnel in respiratory therapy. The first report of herpetic whitlow in a dental professional was in 1959. Whitlows have developed following a puncture wound during an operative procedure or after the provision of treatment with injured fingers or closely trimmed nails, to patients shedding virus. Abrasions or cuts on the fingers increase susceptibility to infection. Herpetic whitlow can occur as either a primary infection or a reinfection, and recurrences may occur secondary to both types. The infection may interfere with practice because of pain and limitation of movement.

Wearing protective lenses can reduce the risk of ocular contact with aerosolized virus-containing saliva, and wearing gloves prevents contact with virus-containing saliva and reduces the risk of development of whitlow. [Merchand, Virginia A. Department of Microbiology and Biochemistry, School of Dentistry, University of Detroit, Detroit 48207. Herpes sim-

plex virus infection: an occupational hazard in dental practice. *J Mich Dent Assoc* 64(4 & 5): 199-203, 1982]

Oral flora associated with nursing bottle caries

Small samples of dental plaque were obtained in the examination of all children seen at Children's Hospital, Boston, who were referred because of problems associated with extensive caries of maxillary anterior and other teeth. The children had a history of being put to bed for the night, and often for daytime naps, with a nursing bottle. Plaque samples were obtained from carious lesions of the maxillary anterior teeth, the white spot margin of these lesions, and clinically sound gingival areas 3 mm or more away from the lesion. Samples were also obtained from generally clinical sound buccal, lingual, or approximal surfaces of posterior teeth distant from the carious anterior teeth. In addition, saliva samples were obtained.

Streptococcus mutans averaged approximately 60% of the total cultivable flora of plaque obtained from the areas associated with nursing bottle caries. It averaged approximately 27% in plaque from mostly clinically sound areas of posterior teeth, and its concentration in saliva averaged approximately 10% of the total cultivable flora.

In contrast to the unusually high levels of *S mutans*, the proportions of *S sanguis* were very low in plaque from the maxillary anterior teeth and higher in plaque from posterior teeth. *S salivarius* was not detected in the saliva of most youngsters.

Lactobacilli were detected in nearly all samples, and their mean in carious lesions was higher than that in either white spot areas or clinically sound tooth surfaces. [van Houte, J.; Gibbs, G.; and Butera, C. Forsyth Dental Center, Department of Oral Microbiology, 140 The Fenway, Boston, 02115. Oral flora of children with "nursing bottle" caries. *J Dent Res* 61(2):382-385, 1982]

Comparison of flosses in reducing plaque, gingivitis

In this clinical trial involving 118 adults, the effect on plaque and gin-

givitis of self-administered flossing using waxed, unwaxed, and mint-flavored dental floss (Johnson & Johnson) was studied. The participants brushed a minimum of once daily, had at least 20 interproximal spaces to be flossed, and were not regular floss users – defined as those who use floss less than once a week. Their average scores for gingival inflammation were between 0.8 and 1.5.

The participants were separated into four groups. Those using one of the three flosses saw a videotape on the use of floss, which was followed by personal supervised instruction. They were instructed to floss once a day, five days a week, and once on weekends. They were asked to continue their regular brushing routines and instructed not to use mouthwashes. At the recall examinations, plaque and gingivitis were scored, and additional instruction in the use of floss was given if necessary. The control group in the study only brushed.

At the end of the trial after eight weeks, a significant reduction in mean gingivitis ($P < .05$) for all flossing groups versus the control group was observed. Although at two weeks, the difference in mean plaque scores was significant ($P < .05$) and the unwaxed floss was significantly ($P < .01$) superior to waxed and mint floss in retarding plaque accumulation, the difference among the flossing groups was not sustained to the study's end.

The daily use of dental floss to supplement cleansing with a toothbrush has a beneficial effect on gingival health. Results show that there is not significant advantage to the use of waxed, unwaxed, or flavored floss. The proper use of floss and the motivation and dedication of the individual to its regular use clearly contribute to an improvement in gingival health. [Lobene, R.R.; Soparkar, P.M.; and Newman, M.B. Forsyth Dental Center, 140 The Fenway, Boston, 02115. Use of dental floss. Effect on plaque and gingivitis. *Clin Prevent Dent* 4(1):5-8, 1982] □

Copyright by the American Dental Association. Reprinted by permission from DENTAL ABSTRACTS.

1982~83 directory

EXECUTIVE COUNCIL:

- **PRESIDENT:** Linda Berry, 1755 Bough Beeches Blvd., Mississauga, Ont. L4W 2B7 Res. (416-624-3495) (May '82 - Sept. '83).
- **PRESIDENT ELECT:** Mary Pelletier, Box 18 Site 5, RR#7, Moncton, New Brunswick E1C 8Z4 Res. (403-456-0977).
- **FIRST VICE-PRESIDENT:** Laura Mowat, 11424 - 161 Ave., Edmonton, Alberta T5X 2L0 Res. (403-456-0977).
- **SECRETARY:** Peggy Knill, 164 Hillcrest Ave., Hamilton, Ontario L8P 2X4 Res. (416-525-5788).
- **TREASURER:** Judi Rogers, 1903 Sherwood Forest Circle, Mississauga, Ont. L5K 2E6 Res. (416-823-3822).
- **IMMEDIATE PAST PRESIDENT:** Patricia Grant, 3 Linden Lane, Halifax, Nova Scotia B3R 1N1 Res. (902-453-4761) Bus. (902-477-9876).

THE BOARD OF DIRECTORS:

- **BRITISH COLUMBIA:** Yvonne Smith, R.R. 3, Site 376, Courtenay, B.C. V9N 5M8 (604-338-6470); Barbara Custance, 1892 Cochrane St., Victoria, B.C. V8R 3H3 (604-592-4105); Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- **ALBERTA:** Barbara Kara, 4112 - 27 Ave., Edmonton, Alberta T6L 4G9 (403-263-5513); Vicki Duncanson, 1629 - 20 Ave. N.W., Calgary, Alberta T2M 1G9 (403-284-2628).
- **SASKATCHEWAN:** Barbara Ferris, 5107-222 Fairmont Drive, Saskatoon, Saskatchewan S7M 4P5 (306-382-3348).
- **MANITOBA:** Gladys Stewart, 454 Niagara St., Winnipeg, Man. R3N 0V5 (204-453-1574).
- **ONTARIO:** Linda McCance, 5027 Wixon Street, Clairmont, Ontario L0H 1S0 (416-649-2056); Ailsa Wood, 505-160 Balmoral Avenue, Toronto, Ontario M4V 1J7 (416-923-1669); Dale Scanlan, 53 Ariel Court, Nepean, Ont. K2H 8J1 (613-828-7962); Linda Perron, 712-101 Governor's Road, Dundas, Ontario L9H 6L7 (416-627-7193); Jan Mulligan, 18-66 Beech Avenue, Toronto, Ont. M4E 3H4 (416-691-3866); Carolyn Roth, 184 Greenbrook Drive, Kitchener, Ontario N2M 4J7 (519-745-6664); Lise Thom, Box 293, Russell, Ontario K0A 3B0 (613-445-2892); Fern Waldman, 2008-3303 Don Mills Rd., Willodale, Ont. M2J 4T6 (416-488-5364); Marilyn Wilson, 100 Sunset Bay, Thunder Bay, Ont. P7A 3L7 (807-344-6184).
- **QUEBEC:** Louise Delorme, 11802 Couin West, Pierrefonds, Quebec, H8Z 1V6.
- **NEW BRUNSWICK:** Barb McCain, P.O. Box 714, Rothesay, N.B. E0G 2W0 (506-693-5152).
- **NOVA SCOTIA:** Lisa Macdonald, 3450 St. Andrews Avenue, Halifax, N.S. B3L 3Y1 (902-455-1048).
- **PRINCE EDWARD ISLAND:** Jean MacLean, 6 Newland Crescent, Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- **NEWFOUNDLAND:** Ingrid Curtis, 67 Roche Street, St. John's, Nfld. A1B 1L9 (902-894-3294).

SPECIAL COMMITTEE CHAIRMEN:

- **CONTINUING EDUCATION:** Mickey Wener, 498 Montrose Street, Winnipeg, Man. R3M 3M9 (204-284-7474).
- **EDUCATION:** Margaret Miller, 404 - 188 Roslyn Rd., Winnipeg, Man. R3L 0G8 (204-284-7474).
- **FINANCE:** Judi Rogers, 1903 Sherwood Forest Circle, Mississauga, Ont. L5K 2E6 (416-823-3822).
- **STUDENT MEMBERSHIP:** Lise Thom, Box 293, Russell, Ont. K0A 3B0 (613-445-2892).

APPOINTEE OFFICERS:

- **EXECUTIVE SECRETARY:** Thora Appelt, 2136 Fillmore Crescent, Ottawa, Ontario K1J 6A4 (614-746-6455).
- **EDITOR:** Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2 (519-254-6224).
- **BOOKKEEPER:** Ailsa Wood, 505-160 Balmoral Ave., Toronto, Ontario M4V 1J7 (416-923-1669).

EXECUTIVE APPOINTMENTS:

- **SPEAKER FOR THE BOARD:** Jo Gardner, 1125 West 54th Ave., Vancouver, B.C. V6P 1N3 (604-261-8642).
- **CONVENTION CHAIRMAN:** 1983: Evelyn McNee, 1509 Lynn Valley Rd., North Vancouver, B.C. V7J 2B1 (604-987-2821).
- **A.C.F.D. DENTAL HYGIENE:** Kate MacDonald, 3914 Novalea Dr., Halifax, N.S. B3K 3G7 (902-445-8868).
- **DENTAL AUXILIARY LIAISON OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Saskatchewan, S4T 1L6 (306-569-1603).
- **INTERNATIONAL LIAISON CHAIRMAN:** Sharon French, 39 Chinook Cres., Nepean, Ontario K2H 7C9 (613-820-1196).
- **DATA BANK REPRESENTATIVE:** Pat Johnson, Oak Deane, R.R. 2, Aurora, Ontario L4G 3C8 (416-727-1433).
- **CDA COUNCIL ON HEALTH CARE:** Kate MacDonald, 3914 Novalea Dr., Halifax, N.S. B3K 3G7 (902-445-8868).
- **CDA COUNCIL ON EDUCATION:** Margaret Miller, 404 - 188 Roslyn Rd., Winnipeg, Man. R3L 0G8 (204-284-7474).
- **CSA TECHNICAL COMMITTEE ON DENTISTRY:** Anne Bosy, 1529 Ballyclare Drive, Mississauga, Ontario L5C 1J4 (416-270-4019).
- **OFFICER OF CDHA ORGANIZATION AND PROCEDURES:** Marjorie Dimitri, 1606 Ayleslynn Drive, North Vancouver, B.C. V7J 2T3 (604-987-7392).
- **PORTABILITY OFFICER:** Dianne Bryant, 3338 Victoria Ave., Regina, Sask. S4T 1L6 (306-569-1603).
- **CORPORATE RELATIONS OFFICER:** Debbie Lang, 2222 Shardawn Mews, Mississauga, Ont. L5C 1W5 (416-275-0786).

STANDING COMMITTEES:

MEMBERSHIP:

- **CHAIRMAN:** Jo Gardner, 1125 West 54th Ave., Vancouver, B.C. V6P 1N3 (604-261-8642).

- **B.C.:** Holly Wilson, 1575 Montgomery Ave., Victoria, B.C. V8V 1T5 (604-595-7980).
- **Alta.:** Linda Klem, 28 Erin Mount Cr. S.E., Calgary, Alta. T2B 2S3 (403-273-8434).
- **Sask.:** Darlene Armstrong, 43-35 Centennial St., Regina, Saskatchewan S4S 6P8 (306-586-9457).
- **Man.:** Darlene Armstrong, 43-35 Centennial St., Regina, Saskatchewan S4S 6P8 (306-586-9457).
- **Ont.:** Kathleen Feres-Patry, 10C Stonehill Crt., Kanata, Ont. K2M 1G2 (613-592-5934).
- **Que.:** Louise Delorme, 11802 Couin West, Pierrefonds, Quebec H8Z 1V6.
- **N.B.:** Brenda Dickie, Bldg. 6, Apt. 3, Greenwood Park, R.R.6, Rothesay, N.B. E0G 2W0 (506-849-2701).
- **N.S.:** Diane Dobson, 242 Duke Street, Apt. 9, Chester, N.S. B0J 1J0.
- **P.E.I.:** Florence Wall, Mt. Herbert, R.R. 5, Charlottetown, P.E.I. C1A 7J8 (902-569-2079).
- **Nfld.:** Coleen Thomey, P.O. Box 544, Mount Pearl, Nfld. A1B 2W4.

MANPOWER AND UTILIZATION:

- **CHAIRMAN:** Jenny Thomas, 2759 Salina Street, Ottawa, Ont. K2B 6P8 (613-820-0405).
- **B.C.:** Randy McIlraith, 301 - 1629 Haro Street, Vancouver, B.C. V6G 1N8 (604-684-2813).
- **Alta.:** Drene Bertrand, 1074 - 56th St., Edmonton, Alta. T6L 1Y3 (403-489-6898).
- **Sask.:** Bev Upton, 143 Bothwell Cres., Regina, Sask. S4R 5Y7 (206-545-7563).
- **Man.:** Ruth Konzelman, 105 Olivier Ave., Selkirk, Man. R1A 0C4 (204-482-6112).
- **Ont.:** Jenny Thomas, 2759 Selina Street, Ottawa, Ontario K2B 6P8 (613-820-0405).
- **Que.:** Louise Delorme, 11802 Couin West, Pierrefonds, Quebec H8Z 1V6.
- **N.B.:** Sharyn Milroy, 85 Oakmore Terr., Moncton, N.B. E1G 1T4 (506-384-1961).
- **N.S.:** Linda Zambolin, 114 Regal Rd., Dartmouth, N.S. B2W 4H8 (902-434-8983).
- **P.E.I.:** Heather Keith, 4 Belvedere Ave., Charlottetown, P.E.I. C1A 6A8 (902-892-9361).
- **Nfld.:** Ingrid Curtis, 67 Roche St., St. John's, Nfld. A1B 1L9 (709-722-1603).

COMMUNITY DENTAL HEALTH:

- **CHAIRMAN:** Joanne Clovis, Seventh St Plaza, 10030 - 107 St., Edmonton, Alta. T5J 3E4 (403-476-6596).
- **B.C.:** Karen Fawley, 305-252 W. 2nd St. North Vancouver, B.C. V7M 1C8 (604-980-3762).
- **Alta.:** Heather McElroy, General Delivery Stettler, Alta. (403-742-5543).
- **Sask.:** Maureen Bowerman, 51 Huron Place Saskatoon, Sask. S7K 4E8 (306-664-3087). Sharon McLean, 1400 Argyle St., Regina Sask. S4T 3S1 (306-525-3289).
- **Man.:** Ruth Konzelman, 105 Olivier Ave., Selkirk, Man. R1A 0C4 (902-482-6122).
- **Ont.:** Laurie Lepik, 70 Sixth St., Toronto, Ont. M8V 3A2 (416-259-6078).
- **Que.:** Louise Delorme, 11802 Couin West, Pierrefonds, Quebec H8Z 1V6.
- **N.B.:** Connie Maddox-Campbell, 860 Bay Ave., Bathurst, N.B. E2A 1W1 (506-546-9161).
- **N.S.:** Terry Mitchell, 1676 Larch St., Apt. 21 Halifax, N.S. B3H 3X1.

- P.E.I.: Pat Stewart, Travellers Rest, Summerside, P.E.I. (902-436-2709).
- Nfld.: Ingrid Curtis, 67 Roche St., St. John's, Nfld. A1B 1L9 (709-722-1603).

NOMINATIONS:

- CHAIRMAN: Mary Pelletier, Box 18, Site 5, R.R.7, Moncton, N.B. E1C 8Z4 (506-384-8728).
- B.C.: Diane Eade, 10500 Springwood Cres., Richmond, B.C. V7E 1X6 (604-274-7392).
- Alta.: Paulette Schulte, 10947 - 36A Ave., Edmonton, Alt. T6J 0E3 (403-434-0925).
- Sask.: Barb Long, 2741 Preston Ave., Saskatoon, Sask. S7G 3G2 (306-373-7434).
- Man.: Kim Harrop, 658 Government Ave., Winnipeg, Man. R2K 1X2 (514-667-0831).
- Ont.: Jan Mulligan, 18-66 Beech Avenue, Toronto, Ont. M4E 3H4 (416-691-3866).
- Que.: Louise Delorme, 11802 Couin West, Pierrefonds, Quebec H8Z 1V6.
- N.B.: Pam Mosher, 1064 Salisbury Rd., Moncton, N.B. E1E 3V6 (506-855-2815).
- N.S.: Yolanda Brasolin, 16½ Sunset Court, Truro, N.S. B2N 3W1.
- P.E.I.: Jean MacLean, 6 Newland Cres., Charlottetown, P.E.I. C1A 4H5 (902-894-3294).
- Nfld.: Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).

CONSTITUTION:

- CHAIRMAN: Laura Mowat, 11424 - 161 Ave., Edmonton, Alta. T5X 2L0 (403-456-0977).
- B.C.: Barbara Custance, 1892 Cochrane St., Victoria, B.C. V8R 3H3 (604-592-4105).
- Alta.: Marg Wilson, 8739 - 67 Ave., Edmonton, Alta. T6J 0E3 (403-434-0925).
- Sask.: Joan Foster, 545 Laurier Drive, Swift Current, Sask. S9H 1L3 (306-713-8754).
- Man.: Louise Dufault, 82 Reil St., Winnipeg, Man. R2M 0Y2 (204-256-9115).
- Ont.: Sue Cathers, 129 Balmoral Street, Thunder Bay, Ont. P7C 4J6 (807-622-2808).
- Que.: Louise Delorme, 11802 Couin West, Pierrefonds, Quebec H8Z 1V6.
- N.B.: Trudy McAvity, Box 949, Rothesay, B.C. E0G 2W0 (506-847-5502).
- N.S.: Linda Zambolin, 114 Regal Road, Dartmouth, N.S. B2W 4H8 (902-434-8983).
- Nfld.: Ingrid Curtis, 67 Roche St., St. John's Nfld. A1B 1L9 (709-722-1603).
- P.E.I.: Debbie Richard, 19 Milbrooke Dr., Charlottetown, P.E.I. C1A 7V2 (902-569-4490).

PROVINCIAL NEWSLETTER EDITORS:

- B.C.: Pat Bowman, 926 W. 22nd Ave., Vancouver, B.C. V5Z 2A1 (604-736-0962).
- Alta.: Adeline Fioriollo, 8911 - 138 Ave., Edmonton, Alta. T5E 2A7.
- Sask.: Marg Bailey, Box 2228, Kindersley, Saskatchewan S0L 1S0 (306-463-2397).
- Man.: Joanne Presunka, 139 Hawkins, Winnipeg, Man., R2N 1H9 (204-254-8203).
- Ont.: Jane Rogers, 10 Lyle Place, Kitchener, Ontario N2B 2J6 (519-576-3718).
- Que.: Lorraine Brouillard, C.P. 36, Succursale Jean-Talon, Montreal, Quebec H1S 2Z1 (514-352-6245).
- N.B.: Nancy Mills, 20 Wilson Rd., Riverview, N.B. E1B 2V8 (506-386-3734).
- N.S.: Diane Forrest, 209-7 Parker St., Dartmouth, N.S.; Cindy Forward, Oyster Pond, Jeddore, N.S.
- Nfld.: Pam Vokey, P.O. Box 205, Gander, Newfoundland A1V 1W6.
- P.E.I.: Frances Piercey, 3 Sunset Drive, Charlottetown, P.E.I. C1A 3J6. □

Help Us Cut Costs

Did you know it costs the CDHA 45¢ for each address correction given by the post office? To remain that returned journal once the new address has been located costs us another 45¢, making our bills for postage due run into several hundred dollars a year.

Help us avoid this expense. Send us your change of address as soon as you know you'll be moving. We'll save money, and you'll continue to receive **The Canadian Dental Hygienist** without interruption. If you're moving, please detach the address label on your envelope, correct it, then paste it in the blank provided & mail this. . . .

Name _____
 Address _____
 City _____
 Province _____
 Postal Code _____

Mail to: Jo Gardner, CDHA Membership Chairman
 1125 West 54th Avenue
 Vancouver, B.C. V6P 1N3

Ministry of Health, Dental Hygienists

Competition 38A —

\$20,784—\$23,808

There are currently eight excellent opportunities available throughout B.C. for career-minded enthusiastic hygienists. Competition will also establish an Eligibility List for future vacancies. Duties include assuming responsibility for pre-school, school and adult dental programs, delivering educational/motivational lessons, inspections/referrals and supervising staff; other related duties as required.

Qualifications — Graduation from recognized university with diploma in dental hygiene or equivalent. May be required to drive personal car on expenses or Government car.



**Province of British Columbia
Public Service Commission**

Positions
are open to both
men and women.
Please send resume
quoting competition number to:

544 Michigan Street, Victoria, B.C., V8V 1S3

annual index

**The Canadian Dental Hygienist/
L'Hygieniste Dentaire du Canada**
Volume 16, January-December 1982;
Spring 1:1-32, Summer 2:1-32,
Fall 3:66-98, Winter 4:99-131

Subject Index

Alternative Roles for Dental Hygienists

Consultant, Dental Health Services, Ministry of Health, D. Gunther. 1:23
Consulting. S. Feller. 2:15
Teaching Master, Dental Auxiliary Program in an Ontario Community College. L. Chochla. 4:119-120
The Business Side of Dentistry. M. Dimitri. 3:77

Book Review

Diet, Nutrition and Dentistry. L. Strevens. 1:30.
Handbook of Local Anaesthesia. B. Goldstein and B. Craig. 2:30

Canadian Dental Hygienists' Association

What do you get for 20¢ a day? K. Feres-Patry. 3:70 CDHA 1982 Board Transactions. 3:74-75

Canadian Fund for Dental Education

October is CFDE Month

Community Dental Health

A Dental Hygiene Student Reports on Delivering Dental Hygiene Services to an Inuit Community. V. Hildebrand. 2:16-18.

Dental Health Education

A Comparison of the Effectiveness of Television vs. Live Instruction for Teaching Flossing in the Classroom. B. Davis and G. Costanzo. 1:12-15
Factors Influencing Dental Health Education for the Aged. B. Zier. 4:110-113

Finance

Personal finance. S. Sheaves. 1:11
Personal finance. S. Sheaves. 2:14

Manpower and Utilization

Characteristics of Dental Hygiene Positions in Canada, 1979, Part 1. D. Lewis and T. Krievins. 4:114-118
Educational, Demographic, Professional, and Employment Characteristics of Dental Hygienists in Canada, 1979. D. Lewis. 3:82-88

Operative Dentistry

Overhanging Amalgam Restorations: Their Prevalence, Ramifications and Eradication. S. Gelskey. 2:19-23

Preventive Dentistry

The Efficacy of Professional Flossing in the Control of Gingival Health. M. Vercaigne and S. Gelskey. 1:16-19

Professional Concerns

Are the Good Times Gone? L. Berry. 4:104
Deciphering the Supervision Jargon. S. Nagle. 1:5
Membership in the Canadian Dental Hygienists' Association: The Professional Choice. F. Jeffs. 3:78-81
Portability Taken to Task. S. Nagle. 2:5

Self Assessment Tests

Dental Epidemiology. S. Issac. 1:22
Case presentation. E. Jesin and H. McCabe. 2:24-25
Nutrition. S. Rudin. 4:108
Radiography. Y. Mothersole. 3:76

Author Index

A-C

Berry, L. Are the Good Times Gone? 4:104
Chochla, L. Teaching Master, Dental Auxiliary Program in an Ontario Community College. 4:119-120
Craig, B. see Goldstein, B. 2:30
Costanzo, G. see Davis, B. 1:12-15

D-E

Davis, B. and **G. Costanzo.** A Comparison of the Effectiveness of Television vs. Live Instruction for Teaching Flossing in the Classroom. 1:12-15
Dimitri, M. The Business Side of Dentistry. 3:77

F

Feller, S. Consulting. 2:15
Feres-Patry, K. What do you get for 20¢ a day? (editorial) 3:70

G

Gelskey, S. Overhanging Amalgam Restorations: Their Prevalence, Ramifications and Eradication. 2:19-23
Gelskey, S. see M. Vercaigne. 1:16-19
Goldstein, B. and **B. Craig.** Handbook of Local Anaesthesia (book review) 2:30
Gunther, D. Consultant, Dental Health Services, Ministry of Health. 1:23

H-I

Hildebrand, V. A. Dental Hygiene Student Reports on Delivering Dental Hygiene Services to an Inuit Community. 2:16-18
Issac, S. Dental Epidemiology (self assessment test) 1:22

J

Jeffs, F. Membership in the Canadian Dental Hygienists' Association: The Professional Choice. 3:78-81
Jesin, E. and **H. McCabe.** Case Presentation (self assessment test) 2:24-25

K-L

Krievins, T. see Lewis, D. 4:114-118
Lewis, D. Educational, Demographic, Professional, and Employment Characteristics of Dental Hygienists in Canada, 1979. 3:82-88
Lewis, D. and **T. Krievins.** Characteristics of Dental Hygiene Positions in Canada, 1979, Part 1. 4:114-118

Mc

McCabe, H. see Jesin, E. 2:24-25

M

Mothersole, Y. Radiography (self assessment test) 3:76

N-R

Nagle, S. Deciphering the Supervision Jargon (editorial) 1:5
Nagle, S. Portability Taken to Task (editorial) 2:5
Rudin, S. Nutrition (self assessment test) 4:108

S-U

Sheaves, S. Personal Finance. 1:11
Sheaves, S. Personal Finance. 2:14
Strevens, L. Diet, Nutrition, and Dentistry (book review) 1:30

V

Vercaigne, M. and **S. Gelskey.** The Efficacy of Professional Flossing in the Control of Gingival Health. 1:16-19

W-Z

Zier, B. Factors Influencing Dental Health Education for the Aged. 4:110-118

classified ads

Classified Advertising Rates:

50 words or less, per ad (minimum) \$20.00 plus 50¢ for each additional word. Payments must accompany ad copy (cheque or money order).

Direct Ads To:

The Canadian Dental Hygienist
%Stephanie Nagle
2221 Victoria Ave.
Windsor, Ontario N8X 1R2
(519-254-6224)

ORIGINAL HYGIENE HASTY NOTES by Sue Scott©. To order your package of 8 notes (4 different situations in all) send your \$4.00 cheque or money order to: The Toronto Central Component Dental Hygiene Society, Catherine Barlow, 715 Don Mills Road, Apt. 2208, Don Mills, Ontario M3C 1S5.

The University of Alberta Faculty of Dentistry

Applications are invited for a full-time non-tenured teaching position in the Dental Hygiene Program. Candidates must have a certificate in Dental Assisting, a Baccalaureate Degree in Dental Hygiene, two

years' related occupational experience and be eligible to practice Dental Hygiene in Alberta. Teaching experience and Master's Degree preferred. Duties will include pre-clinical, clinical, didactic teaching, student advising and other appropriate responsibilities. Salary is commensurate with education and experience. The University is an equal opportunity employer. In accordance with Canadian Immigration requirements this advertisement is directed to Canadian citizens and permanent residents. All inquiries should be forwarded by March 31, 1983 to Professor Barbara Zier, Chairman, Division of Dental Hygiene, Faculty of Dentistry, University of Alberta, Edmonton, Alberta, Canada, T6G 2N8, (403) 432-4479.

Dental Health Buttons

Smile Canada is the slogan for Dental Health Month - April 1983.

Lapel buttons may be ordered now and used as reminders of good dental health all year round.

Note: Order in lots of 100 only. Order early to ensure delivery in time for your local campaigns.

A Project Of
The Canadian Dental
Hygienists' Association/
L'association Cana-
dienne des
Hygienistes Dentaires

Thank you for your support

CDHA LAPEL BUTTONS
Ms. Joanne Clovis
#1, 14310 - 80 Street
Edmonton, Alberta
T5C 1L6

No. of Buttons _____ @ \$25.00/100

Amount of cheque _____

NAME _____

ADDRESS _____

CITY _____ PROV. _____

POSTAL CODE _____

ENGLISH ☐ FRENCH ☐

Remittance must accompany order, payable to CANADIAN DENTAL HYGIENISTS' ASSOCIATION

When you need experienced dental hygienists, an ad in our classified section can put you directly in touch with every qualified candidate in Canada. Just write your copy below and mail directly to Stephanie Nagle, 2221 Victoria Ave., Windsor, Ontario N8X 1R2 (519-254-6224)

Run this advertisement _____ times.

Name _____ Address _____

Telephone _____ Signature _____

CDHA Guide to Submission of Manuscripts

Manuscript:

All manuscripts submitted for consideration for publication should be typed on standard (8½ x 11) paper, double-spaced, with a margin allowance of at least one inch. Three copies should be sent to the editor, and the manuscript must not be submitted to another publication while under review. A title page should be included stating the title of the paper and the author's full name, degree, and position.

Illustrations:

Illustrations must be clearly defined and suitable for reproduction on a reduced scale. Each picture should include a legend and should be marked in numerical order. Graphs and drawings should be drawn in Indian ink on white paper. Photographs must be glossy prints.

Length:

The preferred length of a paper is 8-10 typed pages or 2000 words including references. Space for illustrations should be considered in the length.

Subheadings:

It is suggested that subheadings be used within the paper for the reader's benefit.

References:

References should be lined up numerically. References to journal articles should be made as follows: last name of author followed by initials; title of article with only the initial letter of first word capitalized; full journal name followed by volume, number, first and last pages of article to which you refer, and year.

Example:

Bell, G. Role of the dental hygienist in restorative dentistry. *Dental Health* 40: 139-141, 1973.

References to books should be made as follows: last name of author followed by initials; title of book with initial letters of all words, except connecting words, capitalized; publisher; city of publication; year of publication; page or pages to which you refer.

Example:

Guthrie, H.A. *Introductory Nutrition*. The G.V. Mosby Co., St. Louis, 1975: 153-156.

Notice of Acceptance:

Manuscripts will be acknowledged upon receipt. Authors will be notified of acceptance of their paper before publication. Rejected manuscripts will be returned.

ACHD Recommandations aux auteurs

Textes:

Les textes doivent être remis dactylographiés à double interligne, sur papier 8½" sur 11"; toutes les marges doivent être d'au moins un pouce. Les auteurs doivent remettre un original et deux copies et le texte doit être soumis uniquement à L'Hygieniste Dentaire du Canada. Une page frontispice doit inclure le titre du texte, les noms, qualités et titres et postes du (des) auteur(s).

Illustrations:

Les illustrations doivent être claires afin que leur reproduction sur échelle réduite soit possible. Chaque illustration doit être accompagnée d'une légende dactylographiée. Les graphiques et schémas doivent être dessinés convenablement, à l'encre de Chine sur papier blanc. Les photographies doivent être des épreuves glacées; elles doivent être numérotées dans l'ordre.

Longueur du texte:

La longueur des textes devrait être de 8 à 10 pages dactylographiées ou de 2000 mots y compris les références. Les espaces pris par les illustrations doivent être inclus dans ces limites.

Sous-titres:

Les sous-titres sont recommandés afin de faciliter la lecture du texte.

Références:

Les références doivent être numérotées. Les références à des articles de revues doivent être faites de la façon suivante: nom du (des) auteur(s) initiale(s); du (des) prénom(s), titre de l'article (seule la première lettre du premier mot doit être en majuscule); nom au long du journal, numéro du volume, pages de l'article, année.

Exemple:

Zangwill, O.L. Le problème de l'apraxie idéatoire. *Revue Neurologique*, 102: 595-603, 1960.

Les références à des livres doivent être faites de la façon suivante: nom du (des) auteur(s) initiale(s); titre du livre (dans les titres en langue anglaise, tous les mots sauf les mots d'accompagnement doivent commencer par une majuscule); éditeur; ville où est située la maison d'édition; année de publication, pages (s'il y a lieu).

Exemple:

Guthrie, H.A. *Introductory Nutrition*. The C.V. Mosby Co., St. Louis, 1975: 153-156.

Avis d'acceptation:

Les manuscrits seront reconnus sur réception. Les auteurs seront avisés de l'acceptation du manuscrit avant la publication. Les manuscrits refusés seront retournés.

**WE NEED YOU;
YOU NEED US.**

Renew your
professional membership
today.

Your membership
is your voice in
your future!



cdha *achd*

The Canadian Dental Hygienists' Association National Convention

September 25-28, 1983.
Vancouver, B.C.

SOCIAL PROGRAM

CRUISE VANCOUVER HARBOUR
ABOARD THE YACHT BRITANNIA

... breathtaking scenery and a delicious
pot luck dinner.

CONVENTION REGISTRATION PARTY

... a meeting place for friends and fun

NIGHT AT THE VANCOUVER AQUARIUM

... with a live whale show
(extra tickets available)

PRESIDENTS' LUNCHEON

... a gourmet buffet with fantastic door prizes.

A NIGHT ABOUT TOWN

... at Vancouver's finest restaurants.

FUN RUN IN STANLEY PARK

... or a relaxing walk around the seawall.

conference on the coast

If you are interested in billeting with another hygienist
while in Vancouver, please contact Barb Hewton.
2709 Marine Drive, West Vancouver, B.C. V7N 1L7

The Canadian Dental Hygienists' Association National Convention

SCIENTIFIC PROGRAM

INTERPROFESSIONAL RELATIONSHIPS FOR HYGIENISTS AND THEIR EMPLOYERS

*Learn about stress, powerdynamics
communications and responsibilities*

**INVITE YOUR DENTIST
TO THIS UNIQUE
"BRUNCH AND LEARN"**

LECTURES

Update on Oral Hygiene Techniques
Review on Radiology
Maintenance of Motivation in Children
Infection Control - Hepatitis
Oral Lesions
Orthodontics
Restorative Dentistry
Intra-Oral Photography
Oral Diagnosis

PERSONAL DEVELOPMENT SEMINARS

Wardrobe Planning
Pre and Post Natal Fitness
Fit or Fat
Tax Investments

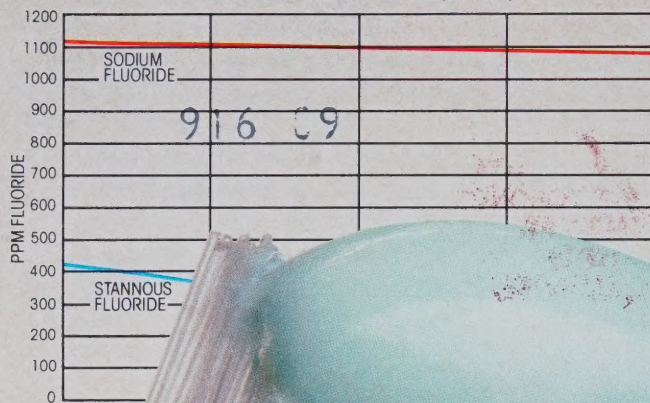
PANEL DISCUSSIONS

Occlusion
Forensic Dentistry
Periodontics
Future of Dentistry

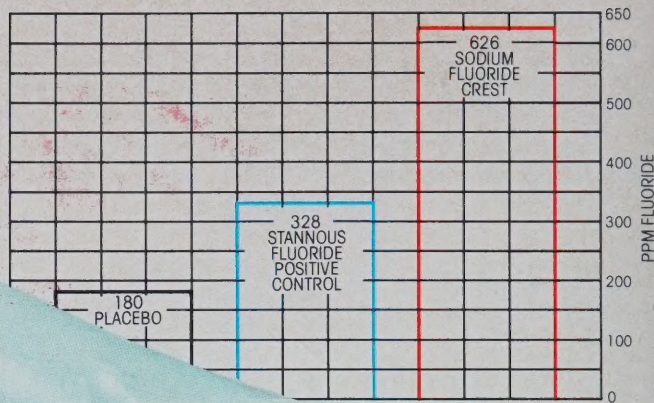
conference on the coast

*Single day registration will be available
Economy down? So is the Registration fee.*

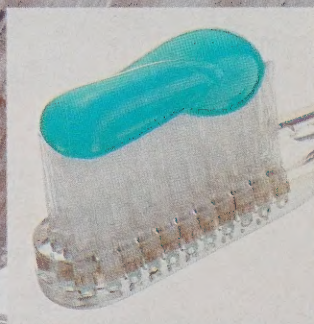
AVAILABLE FLUORIDE OVER TIME (MONTHS)



COMPARISON OF FLUORIDE UPTAKE IN DECALCIFIED ENAMEL



MORE FREE FLUORIDE GIVES TODAY'S CREST MORE FIGHT THAN EVER BEFORE



Even better cavity protection than previous Crest.^{1,2}

Today's Crest supplies 3 to 5 times more free fluoride to the tooth.³ More importantly, a new study by Dr. M. J. Mobley⁴ shows that this fluoride is taken up by decalcified enamel at nearly twice the level of previous Crest. It has been suggested that a high level of free fluoride in incipient carious lesions accelerates the natural remineralization process.⁵⁻⁸

This helps explain why Crest gives your patients more fight than ever before.

Even better patient compliance with a new great-tasting gel.

Crest's unique active/abrasive formula is now available in a third flavour, a translucent blue gel. It's an excellent chance for improved compliance, particularly with your younger patients! No wonder Crest still leads in good dental health for the whole family.

References

1. Zacherl, W.A.: Pharm Therap Dent, 6:1-7, 1981.
2. Beiswanger, B.B., Gish, C.W., Mallatt, M.E.: Pharm Therap Dent, 6:9-16, 1981.
3. Data on file at Procter & Gamble Inc.
4. Mobley, M.J.: J Dent Res, 60 (12):1943-1948, 1981.
5. Arends, J., ten Cate, J.M.: J Cryst Gro, 53:135-147, 1981.
6. Silverstone, L.M.: Caries Res, 11 (Suppl. 1):59-84, 1977.
7. Ostrom, C.A., et al: J Dent Res, 56(3):212-221, 1977.
8. Zahradnik, R.T.: J Dent Res, 59(6):1065-1066, 1980.



You've never had better reason to recommend Crest.

Crest



Crest* contains sodium fluoride which is, in our opinion, an effective decay preventive agent, and is of significant value when used in a conscientiously applied program of oral hygiene and regular professional care.
CANADIAN DENTAL ASSOCIATION

**Harry R. Abbott
Memorial Library**

**FACULTY OF DENTISTRY
124 EDWARD ST.
TORONTO, ONT.**

UNIVERSITY OF TORONTO

DEC 4 1980

(223-2151-108)

(223-0681-105)

NOV 27 1991

7 DAYS

THIS BOOK MAY BE KEPT FOR
7 DAYS ONLY
IT CANNOT BE RENEWED

JAN 23 1984 DEC 4 1990

FEB 17 1984 NOV 27 1991

APR 10 1985 AUG 26 1993

JUL 25 1985

SEP 16 1985

NOV 25 1985

DEC 2 1985

JAN 16 1986

FEB 3 1986

FEB 5 1986

FEB 12 1986

MAY 12 1986

JUL 10 1986

OCT 29 1986

270A-3-71

